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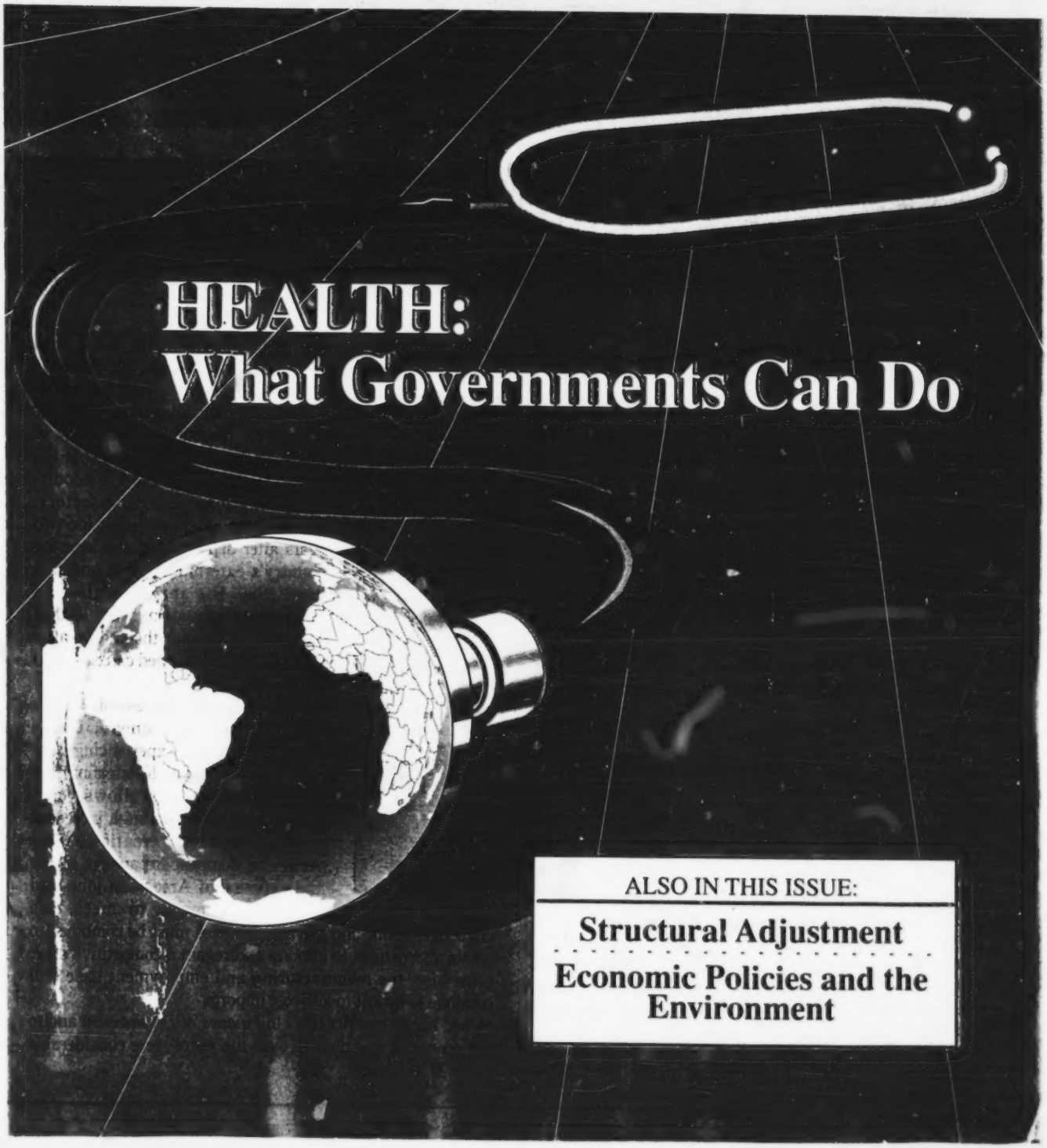
FINANCE & DEVELOPMENT

A QUARTERLY PUBLICATION OF THE INTERNATIONAL MONETARY FUND AND THE WORLD BANK



HEALTH: What Governments Can Do

ALSO IN THIS ISSUE:

Structural Adjustment

Economic Policies and the Environment

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IN MEMORIAM

Samuel I. Katz

(1916-1993)

SAMUEL KATZ, Editor of *Finance & Development* from 1977 until 1982, died of cancer this May at the age of 77.

Mr. Katz served with the US Army in Europe during World War II and with the postwar military government in Germany, where he helped organize price controls in the US Zone. Educated at George Washington University, the London School of Economics, and Harvard, he began his career as an economist with the Federal Reserve Board in 1948; at the time of his retirement in 1974, he was Adviser to the Division of International Finance. Mr. Katz also taught at Georgetown University's School of Foreign Service, Harvard, the Massachusetts Institute of Technology, and the Fletcher School of Tufts University.

Described by a colleague as a classical economist who very much supported the IMF's role in carrying out the mandate of the Bretton Woods Agreement, Mr. Katz was keenly interested in exchange rate issues, in particular the movement toward a floating exchange rate arrangement. His publications include *The Case for the Par-Value System* (1972), *"Managed Floating" as an Interim Exchange-Rate Regime, 1973-1975* (1975), and other internationally distributed books and conference volumes, as well as monographs and articles on international monetary affairs.

Among his recently published articles is a review article of a conference volume on the effects of the 1985 dollar depreciation on the balances of payments of the United States, Japan, and Germany. In "International Adjustment and Finance: Lessons of 1985-91," Mr. Katz took issue with the theory that exchange rates promote adjustment and that the international mechanisms had functioned adequately in the latter half of the 1980s. Rather, he contended that the overvalued dollar of the early 1980s injured US import-competing manufacturing sectors, widened the external deficit for two years after depreciation, and kept the country's external position unstable until 1990. His analysis offers an interesting explanation of the 1990-91 recession and shows the author, after a long and distinguished career, still at his most insightful.

Noting that the recession clearly demonstrated the economic uncertainty America is experiencing as it enters the 1990s, Mr. Katz maintained that import leakage allows other countries to profit, through increased savings and job creation, from American domestic expansion, but at the expense of American jobs and savings. In order to meet this challenge, public and private resources must be combined to create alternatives to imports and regain a competitive edge; otherwise, the manufacturing and employment base will continue to be lost to low-cost imports.

Mr. Katz's contributions to *Finance & Development* and to the economic community over the years were considerable and will be missed.

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READEX
FICHE

Investing in Health

DEAN T. JAMISON

COUNTRIES worldwide spend huge sums on health—about $1,700 billion a year, or roughly 8 percent of global income. But the World Development Report 1993 ***shows that these monies could be spent much more wisely, in the process doing a great deal to help the world's one billion poor.***

In recent years, health reform has shot up to the top of political agendas throughout the world. For the industrial countries and many middle-income developing countries, reasons include rapidly rising costs, the large numbers of people still not covered by insurance, and the fear of AIDS. For developing countries, the main reason is a better understanding of the importance of health for improving the productivity of workers and of the potential for enormous gains in health at very low cost.

The Bank's own lending in health has more than tripled in the past three years—to over $1 billion a year—making the agency the single largest source of external finance for health. At the same time, the World Bank's recent *World Development Reports* have stressed both the importance of health in poverty reduction and the key role of government in achieving the right level and mix of health outcomes.

Against this background, the *World Development Report 1993* set out to answer the following questions: Could the $170 billion a year that developing countries spend on health—almost 5 percent of their income—be reallocated in ways that would substantially improve the health status of their populations? If yes, since these governments spend $85 billion a year, or about 50 percent of this amount, which financial and institutional arrangements should they adopt or promote to facilitate these reallocations?

The conclusions of the Report are heartening. The *WDR* found that not only could the monies be better spent but also millions of lives and billions of dollars could be saved over the next few decades if governments—supported by donors—rethought their approaches to health reform. These conclusions were reached, in part, in light of new research undertaken as background for the *WDR*. This involved quantitatively assessing the global (and regional) burden of disease (i.e., the present value of future streams of disability-free life lost as a result of death, disease, or injury) and systematically weighing the cost and cost-effectiveness of interventions to reduce that burden.

Progress and problems

Over the past 40 years, life expectancy has improved more than during the entire previous span of human history. In 1950, life expectancy in developing countries was 40 years; by 1990, it had increased to 63 years. In 1960, 22 out of every 100 children died before their fifth birthday; by 1990, the number had fallen to 10 (Chart 1). Similarly, the adult mortality rate (the probability of dying between ages 15 and 60 per 1,000 persons reaching age 15) fell from about 450 in 1950 to about 230 in 1990. In Chile, a country that has made exceptional progress, the rate dropped from 466 in 1930 to 152 in 1990. Smallpox, which killed more than 5 million people annually in the early 1950s, has been eradicated entirely. Vaccines have drastically reduced the occurrence of measles, polio, and other diseases.

These dramatic improvements over the past 30–40 years matter, because not only do they translate into direct and significant gains in well-being, but they also contribute to economic growth. They reduce productivity losses caused by

worker illness; they permit the use of natural resources that had been totally or nearly inaccessible because of disease; they increase the enrollment of children in school and make them better able to learn; and they free up resources for alternative uses. Indeed, a review of economic growth rates in over 70 developing countries over the past quarter century shows that healthier countries grew faster. The data suggest that in poor countries with a high burden of disease, measures that cut childhood mortality by a modest 15 percent could increase the rate of income growth by nearly 25 percent.

Despite these remarkable improvements, however, enormous health problems remain. Absolute levels of mortality in developing countries are still unacceptably high; child mortality rates are about ten times higher than those in the established market economies. If death rates among children in poor countries were reduced to those prevailing in the rich countries, 11 million fewer children would die each year. Almost half of these preventable deaths are a result of diarrheal and respiratory illness, exacerbated by malnutrition. In addition, every year 7 million adults die of conditions that could be inexpensively prevented or cured; tuberculosis alone causes 2 million of these deaths. Over 400,000 women die from the direct complications of pregnancy and childbirth. Maternal mortality ratios are, on average, 30 times as high in developing countries as in high-income countries.

Moreover, although health has improved even in the poorest countries, the pace of progress among countries and regions has been uneven. In 1960, in Ghana and Indonesia, about one child in five died before reaching age 5—a child mortality rate typical of many developing countries. But by 1990, Indonesia's rate had dropped to about one half the 1960 level, while Ghana's had fallen only slightly.

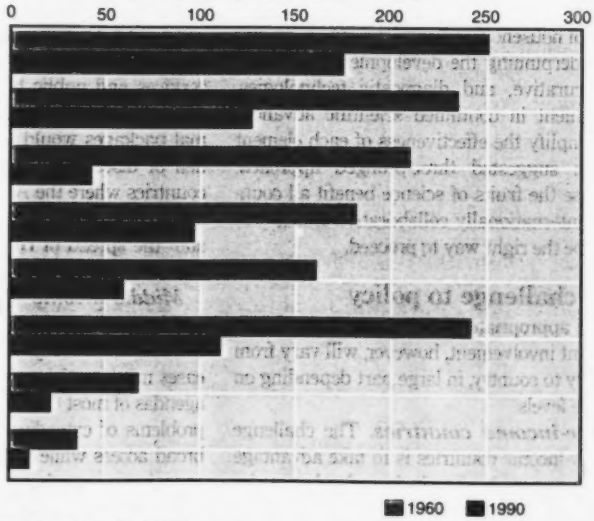
Besides this unfinished agenda, the world must also contend with serious new health challenges:

- Rapid progress in reducing child mortality and fertility rates will create fresh demands on health care systems as the aging of populations brings to the fore costly noncommunicable diseases of adults and the elderly. Amplifying the effects of aging, tobacco-related deaths from heart and lung disease alone are likely to double by the first decade of the next century, to 2 million a year; if present smoking patterns continue, they will grow to more than 12 million a year in developing countries in the second quarter of the century;
- By the year 2000, the toll from AIDS in developing countries could easily rise to more than 1.8 million deaths annually—a fourfold increase from 1990—erasing decades of hard-won reductions in mortality; and
- The malaria parasite's increased resistance to available drugs—part of a disturbing trend of a growing number of drug-resistant disease strains—could lead to a doubling of malaria deaths, to nearly 2 million a year within a decade.

Chart 1

Child mortality has dropped sharply

Probability of dying by age five (per 1,000)



Source: *World Development Report 1993*, World Bank.

What governments can do

Given the enormous sums governments spend on health care—not to mention the vital role of health investments in reducing poverty and the pervasiveness of market failures in the health sector—it makes sense to expect governments to take the lead in addressing these problems. But, as Chart 2 shows, higher spending alone, for any level of income and education, will not necessarily translate into better health.

This raises several critical questions. What does account for these large deviations? How much is attributable to the characteristics of health systems? How can public policy help to provide better health outcomes for a given national effort? The answers all point to the need for good government policies, which is why the bulk of the *WDR* centers on the relationship between policy choices and health outcomes, especially for the poor (see "Rethinking the Government's Role in Health" in this issue). The Report advocates a three-pronged approach.

Foster an environment that enables households to improve health. Household decisions shape health, but these decisions are constrained by the income and education of household members (see "The Foundation for Better Health" in this issue). Besides promoting overall economic growth, governments can strengthen household capacity to improve health if they:

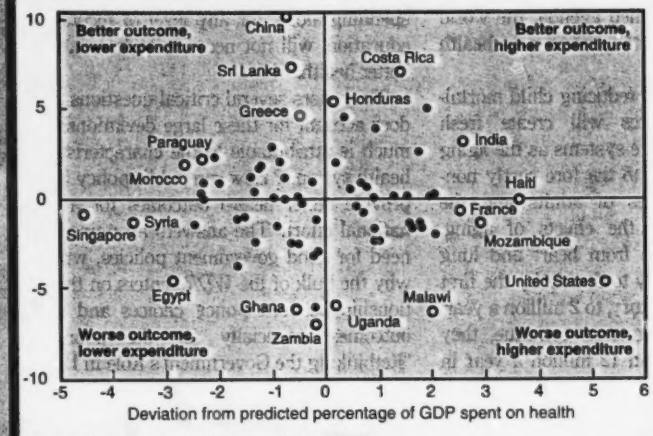
- pursue economic growth policies that will benefit the poor (including, where necessary, adjustment policies that preserve cost-effective health expenditures);
- expand investment in schooling, particularly for girls; and
- promote the rights and status of women through political and economic empowerment and legal protection against abuse.

Improve government spending on health. The challenge for most governments is to concentrate resources on compensating for market failures and efficiently financing services that will particularly benefit the poor. This can be done in several ways:

- reduce government expenditures on tertiary facilities, specialist training, and interventions that provide little health gain for the money spent;
- finance and implement a package of public health interventions to deal with the substantial spillover effects surrounding infectious disease control, prevention of AIDS, environmental pollution, and behaviors that put others at risk (e.g., drunk driving);
- finance and ensure delivery of a package of essential clinical services. The comprehensiveness and composition of such a package can be defined only by each country, taking

Chart 2

Life expectancies and health expenditures in selected countries



Source: *World Development Report 1993*, World Bank.

Good policies matter

Differences in health spending are an obvious starting point in the search for why some countries have better health levels than others. But as this chart shows, health spending alone cannot explain the discrepancies—nor can income and education, or even spending, income, and schooling taken together.

The vertical axis shows how far life expectancy in a country differs from the value predicted on the basis of that country's income and average schooling. France, Haiti, Singapore, and Syria have almost exactly the life expectancy predicted. China, Costa Rica, Honduras, and Sri Lanka all achieve five years or more of life beyond what would be expected. Egypt, Ghana, Malawi, Uganda, the United States, and Zambia all have a life expectancy about five years lower than expected.

The horizontal axis shows how far total health spending differs from the value predicted by income and education. Egypt, Morocco, Paraguay, Singapore, and Syria spend relatively little. France, Haiti, India, Mozambique, and the United States spend more than expected.

At any level of income and education, higher health spending should yield better health, all else being equal. But there is no evidence of such a relation. Countries are scattered in all quadrants. The countries that appear in the upper-left quadrant obtain better health for less money. China, for instance, spends a full percentage point less of its GNP on health than other countries at the same stage of development but obtains nearly ten years of additional life expectancy. The United States is another extreme case, spending 5 percent more of GNP than predicted to achieve several years less of life expectancy than would be typical for its high income and educational level.

So why do some countries have better health levels than others? The missing link looks to be the quality of a government's health policy.

into account epidemiological conditions, local preferences, and income. In most countries, public finance, or publicly mandated finance, of an essential clinical package would provide a politically acceptable mechanism for distributing welfare improvements and a productive asset—better health—to the poor; and

• improve management of government health services through such measures as decentralization of administrative and budgetary authority and contracting out of services.

Promote diversity and competition. Government finance of public health and of a nationally defined package of essential clinical services would leave the remaining clinical services to be financed privately or by social insurance within the context of a policy framework established by the government. Governments can promote diversity and competition in the provision of health services and insurance by adopting policies that:

• encourage social or private insurance (with regulatory incentives for equitable access and cost containment) for clinical services outside the essential package;

• encourage suppliers (both public and private) to compete to deliver clinical services and provide inputs, such as drugs, to publically and privately financed health services. Domestic suppliers should not be protected from international competition; and

• generate and disseminate information on provider performance, on essential equipment and drugs, on the costs and effectiveness of interventions, and on the accreditation and status of institutions and providers.

Increased scientific knowledge has accounted for much of the dramatic improvement in health that has occurred in this century by providing information that forms the basis of household and government action and by underpinning the development of preventive, curative, and diagnostic technologies. Investment in continued scientific advances will amplify the effectiveness of each element of the suggested three-pronged approach. Because the fruits of science benefit all countries, internationally collaborative efforts will often be the right way to proceed.

The challenge to policy

The appropriate nature and extent of government involvement, however, will vary from country to country, in large part depending on income levels.

Low-income countries. The challenge for low-income countries is to take advantage of the potential of today's technologies for achieving major gains in health at the relatively low costs that are clearly possible. One of the important findings of the Report, which in many ways confirms but also extends the received wisdom in public health, is that a relatively small number of highly efficacious interventions—activities aimed at reducing disease risks, treating illnesses, or palliating the consequences of disease and disability—can, at low cost, dramatically reduce the burden of disease (see "Designing an Essential National Health Package" in this issue).

The *WDR* estimates that at a cost of about $12 a person per year in the low-income countries, minimal packages of essential clinical services and public health interventions can be provided for all citizens. Even these minimal packages would reduce the current burden of disease by almost one third and, in countries where the AIDS epidemic is already established or incipient, greatly reduce or forestall the spread of HIV (human immunodeficiency virus).

Middle-income countries. For the middle-income and formerly socialist countries in Europe, certainly, the struggle against diseases must continue. Yet high on the political agendas of most of these countries are the dual problems of extending access or maintaining broad access while containing the often rapid growth in costs (hopefully, more successfully than their OECD counterparts have done). Countries at this stage in the evolution of health policies face three fundamental questions.

(1) How should insurance be provided? As incomes rise, the demand for insurance against catastrophic or even major health care needs rises more than proportionately. This induces a shift away from financing health care by out-of-pocket payments, the main source of financing in low-income countries. Two main options are open to middle-income countries. One is to move toward the current US system, which relies substantially on private voluntary insurance. The other is to follow the examples of Canada, Japan, and most European countries, where general government revenue or social insurance cover the cost of relatively comprehensive essential packages, leaving only a small discretionary residual for private insurance. After a careful review of the evidence, the *WDR* comes down strongly on the side of choosing the government-financed or mandated approach as the best way for the middle-income countries to achieve high levels of access and efficient operation of insurance markets. Otherwise, competition among insurers leads to the exclusion of high-risk groups from coverage, and the voluntarily uninsured can free ride on the unwillingness of most societies to leave them untreated in emergencies.

(2) What should insurance cover? Deciding which items should be covered by insurance and which items should be excluded plays a key role in determining costs and, ultimately, health outcomes. Here the Report relies on systematic assessment of the cost-effectiveness of interventions—the health gain per dollar spent on interventions as diverse as immunization programs and coronary artery bypass surgery—to help identify which interventions provide the best value for money.

(3) How should medical service providers be paid? The *WDR* argues that a much greater reliance on the competitive provision of service would likely improve both the responsiveness of health care systems to their clients and the efficiency with which they operate. But this can easily lead—when providers are compensated on a fee-for-service basis reimbursed by third party insurance—to the very cost escalation that government policies seek to avoid.

What are the alternatives? One approach is to encourage prepayment of a fixed amount for each person, as is now done in private health maintenance organizations and in the British National Health Service. Providers can then be paid salaries based in part on the number of individuals in their practice—so-called capitation schemes. Another is for insurers jointly to negotiate uniform fees with doctors and hospitals, as is done in Japan's social insurance system and Zimbabwe's private medical aid insurance system; or insurers themselves can set fixed payments for specified medical diagnoses, as in Brazil. Yet a third approach, which has been tested on a limited scale in the United States, is "managed competition." This scheme pursues the three objectives of cost-effective health spending, universal insurance coverage, and cost containment simultaneously through tightly regulated competition among companies that provide a specified package of health care for a fixed annual fee. Each of these approaches has proved workable, but each also has its limits and disadvantages. There are no simple answers for health policymakers.

What lies ahead

Adoption of the *WDR*'s major recommendations will not be easy for developing countries. To reach most people with the minimum package of cost-effective public health and essential clinical services, nearly half of current government expenditures on other more discretionary care will have to be redirected. An array of interest groups will also stand to lose—from suppliers of medical services to rich beneficiaries of public subsidies to protected drug companies. Many of the proposed changes will take years to implement fully.

Dean T. Jamison
a US citizen, is a UCLA professor and was Staff Director of the WDR 1993. *Formerly a Bank Division Chief, he holds a Masters degree in Engineering from Stanford and a PhD in economics from Harvard.*

But a number of developing countries have already shown in recent years that broad health sector policy reforms are possible when there is sufficient political will and when health system changes are designed and implemented by capable planners and managers. Zimbabwe imposed a decade-long moratorium on new investments in central hospitals and concentrated on improving health centers and other district-level infrastructure. Tunisia has converted 11 large government hospitals to semiautonomous institutions with strong incentives for improved performance. During the 1980s, both Costa Rica and Korea achieved universal coverage with public insurance for health.

Donors can assist the reform process in several critical ways: they can provide technical and financial support to countries implementing essential public health and clinical packages; they can facilitate policy reform with transitional financial subsidies (including for recurrent costs); and they can finance and participate in the research and development agenda that will provide the knowledge and products for more effective health investments in a decade's time. The Bank can help by boosting its own level of assistance—especially for sectoral adjustment loans aimed at easing the transitional costs of reform. It should also focus its investment projects more tightly on the essential public health and clinical packages.

Yet, despite the potential, donor support for health has actually fallen—from 7 percent of total aid in the first half of the 1980s to 6 percent in the second half. This has hit low-income Africa the hardest, as aid already covers more than half the health budget in Burundi, Chad, Guinea-Bassau, Mozambique, and Tanzania. The *WDR* calls for a reversal of this trend, urging donors to help catalyze reform by increasing external assistance for health by $2 billion over the next five years from its current level of about $4.5 billion a year.

The benefits to the developing world from adopting sound investment policies for health are enormous. There is great potential for change during the closing years of this decade as more countries encourage broad political participation and public accountability, as levels of education and knowledge improve, and as the understanding of human biology, public health, and health care systems increases. If the right policy choices are made, the payoff will be high. The momentum of past reductions in the burden of infectious disease can be maintained and accelerated, the AIDS epidemic can be slowed or reversed, and the emerging problems of noncommunicable disease in aging populations can be managed without rapid increases in health outlays. This will translate into longer, healthier, and more productive lives for people around the world—especially the more than one billion now living in poverty. ■

The World Development Report 1993 *has been prepared by a team led by Dean T. Jamison and comprising José-Luis Bobadilla, Robert Hecht, Kenneth Hill, Philip Musgrove, Helen Saxenian, Jee-Peng Tan, and, part-time, Seth Berkley and Christopher J.L. Murray. The work was carried out under the general direction of Lawrence H. Summers and Nancy Birdsall. For information on ordering copies, see advertisement on page 9.*

Rethinking the Government's Role in Health

ROBERT HECHT AND PHILIP MUSGROVE

AS DEVELOPING countries wrestle with the appropriate role for government in health care, the* World Development Report 1993 *calls for a large public role on the financing side but a greater involvement of nongovernmental organizations and the private sector in the delivery of services.

There is no question that governments all over the world have played a vital role in bringing about the great advances in health over the past 40 years. Public health measures are responsible for eradicating smallpox and have been central to the reduction in deaths caused by other vaccine-preventable childhood diseases. Expanded and improved clinical care by government doctors and nurses has saved millions of lives from infectious diseases and injuries. Better prenatal and delivery services organized by governments have lowered the rate of serious complications of pregnancy and childbirth for millions of mothers.

But there are several major problems with the way health systems are now run and financed, and if solutions are not found, and quickly, the pace of progress in reducing the burden of premature mortality and disability—and in responding to the new health challenges and emerging disease threats—will be slowed.

Misallocation. Public money is spent on health interventions with low cost-effectiveness, such as surgery for most cancers, at the same time that critical and highly cost-effective interventions, such as treatment of tuberculosis and sexually transmitted diseases (STDs), remain underfunded.

Inequity. The poor lack access to basic health services and receive low-quality care. Government spending for health goes disproportionately to the affluent, in the form of subsidies to sophisticated public tertiary care hospitals and to private and public insurance. In Indonesia, for example, despite a major investment in lower-level health facilities during the 1980s, only 12 percent of public spending for health in 1990 went for services consumed by the bottom 20 percent of households, while the top 20 percent obtained 29 percent of the government subsidy.

Inefficiency. Much of the money spent on health is wasted because brand-name pharmaceuticals are purchased instead of generic drugs, health workers are badly deployed and supervised, and hospital beds are underutilized. Disparities in the average length of stay across hospitals with a similar mix of cases point to major inefficiencies: average stays in government hospitals in Latin America varied from 5 days in Colombia to 13 days in Uruguay.

Cost explosion. In some middle-income developing countries, health care expenditures are growing much faster than income, as increasing numbers of specialists, the availability of new medical technologies, and expanding health insurance linked to fee-for-service payments together generate a rapidly growing demand for costly tests, procedures, and treatments. In Korea, for example, the share of GDP devoted to health has shot up from 3 percent in 1980 to 7 percent in 1990.

As developing and industrial countries alike rethink the best way to provide health care in the century ahead, the *WDR* argues that governments should step up their financ-

ing while allowing more participation by nongovernmental organizations and the private sector in supplying services.

The policy response

It makes sense for governments to be involved. The poor cannot always afford the health care that would improve their productivity and well-being. Some actions to promote health are pure public goods or create large positive spillover effects. And market failures in health care and health insurance mean government intervention can raise welfare by improving the way those markets function.

But a major government role—especially where large outlays occur—also means the potential for continuing misallocation, waste, and an inequitable distribution of resources is huge. Governments spent over $1,000 billion in 1990, or nearly 60 percent of the global expenditures on health (Table 1). In the developing world, governments accounted for half of the $170 billion devoted to health—roughly 5 percent of their GNP.

Clearly, governments have a responsibility to spend wisely and to evaluate carefully exactly what form their involvement should take. The *WDR* recommends four main policies to overcome the existing weaknesses of health systems in developing countries:

- Governments should finance a nationally defined package of essential public health and clinical care, especially for the poor, and should ensure the widespread and efficient delivery of such a package.
- The public sector should devote far fewer resources, or none at all, to financing health services outside of the essential package, which are of lower cost-effectiveness.
- Governments should promote types of health insurance that not only achieve broad coverage of the population but also build in payment mechanisms that control the cost of health services.
- Governments should encourage diversity and competition in the supply of health inputs, particularly drugs, supplies, and equipment, as a means of improving quality and driving down costs. They should also foster a competitive private sector to provide the full range of health services, including those financed publicly.

A basic health package

Government action in many areas of public health has already had an important payoff. The challenge now is to expand coverage of interventions with high cost-effectiveness: school-based health services; information on family planning and nutrition; programs to reduce tobacco and alcohol consumption; regulation, information, and limited public investments to improve the household environment; and AIDS prevention.

At the same time, governments should also put together a package of essential clinical services, although this will vary from country to country, depending on local health needs and the level of income. At a minimum, the package should include five groups of interventions that each address very large disease burdens at low cost: prenatal and obstetric care; family planning services; tuberculosis control, mainly through drug therapy; treatment of STDs; and care for the common serious illnesses of young children—diarrheal disease, acute respiratory infection, measles, malaria, and acute malnutrition. Other interventions could be added to make up a more generous essential package if public resources permit and the minimum package is adequately financed. Widespread adoption of even the minimum public health and clinical package would greatly improve health in developing countries.

If 80 percent of the population were reached, 32 percent of the current burden of disease in low-income countries and 15 percent of that in middle-income countries could be averted. To do so would cost just $12 per capita in low-income countries and $22 per capita in middle-income countries.

Redirecting public spending

Public financing of an essential clinical package can be justified because the package creates positive spillover effects and reduces poverty. However, the case for government financing of discretionary clinical health care services outside of the essential national package is far less compelling. In fact, if governments reduced or eliminated public funding of these services, they would actually increase in both efficiency and equity.

One important way to redirect government spending away from discretionary care is to recover costs in government hospitals, especially from the wealthy and the insured. Even in low-income countries—such as Ethiopia, Kenya, Pakistan, and the Philippines—where insurance may account for less than 5 percent of total health spending, a combination of limited private insurance and the ability of upper-income groups to pay makes it feasible for governments to charge for discretionary care delivered in public hospitals. In Kenya, the government is currently attempting to recover

Governments spend huge sums on health, 1990

Demographic region	Percentage of world population	Total health expenditure (billion dollars)	Health expenditure as percentage of world total	Public sector health expenditure as percentage of regional total	Percentage of GNP spent on health	Per capita health expenditure (dollars)	Ratio of per capita spending (SSA = 1)
Established market economies	15	1,483	87	60	9.2	1,860	78.9
Formerly socialist economies of Europe	7	49	3	71	3.6	142	6.0
Latin America	8	47	3	60	4.0	105	4.5
Middle Eastern crescent	10	39	2	58	4.1	77	3.3
Other Asia and islands	13	42	2	39	4.5	61	2.6
India	16	18	1	22	6.0	21	0.9
China	22	13	1	59	3.5	11	0.5
Sub-Saharan Africa	10	12	1	55	4.5	24	1.0
Demographically developing countries	78	170	10	50	4.7	41	1.7
World	100	1,702	100	60	8.0	323	13.7

Source: *World Development Report 1993*, Table A.9, World Bank.
Note: SSA, sub-Saharan Africa.

the cost of caring for the wealthy at the national referral hospital in Nairobi. In middle-income countries, where insurance becomes more important, there is even greater potential for cost recovery.

Governments should also phase out public subsidies to insurance, which generally benefit the better-off. In Guatemala, Honduras, Mexico, Nicaragua, and Venezuela, governments contribute a percentage of individual workers' wages to social security sickness funds; in Chile and Uruguay, they cover the operating deficits of the funds; and in Colombia and El Salvador, they pay directly for a part of the cost of publicly insured health services. Tax deductions on employer and employee contributions subsidize private insurance in South Africa and elsewhere. Once these subsidies are in place, they are extremely difficult to eliminate. An exception is Zimbabwe, where major political shifts—national independence and the advent of a democratically elected government in 1980—led to reduced tax breaks on insurance premiums.

Controlling costs

Even where subsidies on discretionary clinical services for the better-off are cut or public insurance is universal and pays for a more comprehensive set of services in the national package, governments still must contend with the problem of escalating health care costs. These costs can crowd out spending on other sectors of the economy or raise the price of labor, threatening a country's international competitiveness.

The sources of excess health cost are complex and much debated. Health services are labor intensive, and their productivity grows slowly compared to other areas of the economy. In the United States, higher levels of underlying morbidity and greater hospital amenities relative to the other industrial countries are part of the answer. But two types of inefficiencies are also important: high administrative costs and unnecessary use of an ever-expanding array of costly technologies for diagnostic tests and surgical procedures. These inefficiencies appear to be closely linked to two basic features of the US health system. Open-ended fee-for-service compensation for health providers encourages the development of new equipment, drugs, and procedures, since neither providers nor patients have strong incentives to hold down utilization or spending. A complex system of multiple insurance institutions and other payers, each with its own procedures, raises administrative costs substantially.

These findings concerning health cost escalation in industrialized countries are especially relevant for middle-income developing countries, which are under pressure from medical professionals, manufacturers, and consumers to use new medical techniques. They face difficult policy choices related to provider compensation. One approach to controlling health costs is to pay a fixed amount for each person ("capitation"), as is now done by health maintenance organizations in the United States and by the British National Health Service. Another approach used in several industrial countries is to provide each hospital or network of physicians with a fixed total budget. Insurers can jointly negotiate uniform fees for physicians, as is done by Japan's social insurance system and by Zimbabwe's private insurance system, or they can set fixed payments for specified medical procedures, as in Brazil.

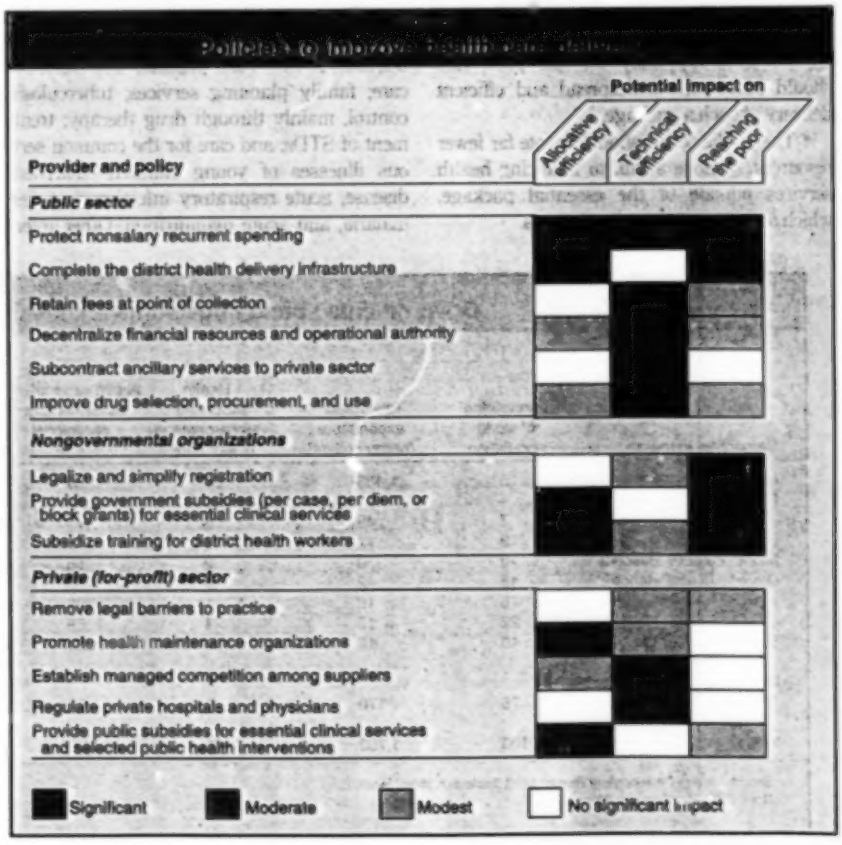
Promoting competition

Although governments have a fundamental responsibility for financing basic health services, they need not be responsible for delivering those services. On the contrary, experience suggests that diversity and competition lead to better results. In a competitive system, people seeking health services can choose from a variety of providers—public, private nonprofit, and private for-profit. As developing countries move toward such a system, they face a wide range of policy options (Table 2).

Nongovernmental organizations (NGOs) provide a major share of health services in developing countries, especially for low-income households in the poorest countries. Although it is difficult to compare the performances of NGOs and government health facilities, recent data from Africa suggest that NGOs are often more efficient. Governments that have excluded NGOs or heavily restricted their operations have seen essential services deteriorate. Where such bans or barriers to NGO activity exist, they should be removed.

Beyond this, there are opportunities for governments to form constructive partnerships with NGOs to deliver essential clinical services. Governments in Tanzania and Lesotho allow appropriately located religious mission hospitals to serve as district hospitals and make them responsible for a full range of public health and clinical services and for performing district-wide functions such as health planning, supervision of lower-level clinics and community activities, and maintenance of emergency transport. In return, the government pays some of the NGOs' costs.

In Africa and Asia, where traditional


Potential impact on
Allocative efficiency
Technical efficiency
Reaching the poor
Provider and policy
Public sector
Protect nonsalary recurrent spending
Complete the district health delivery infrastructure
Retain fees at point of collection
Decentralize financial resources and operational authority
Subcontract ancillary services to private sector
Improve drug selection, procurement, and use
Nongovernmental organizations
Legalize and simplify registration
Provide government subsidies (per case, per diem, or block grants) for essential clinical services
Subsidize training for district health workers
Private (for-profit) sector
Remove legal barriers to practice
Promote health maintenance organizations
Establish managed competition among suppliers
Regulate private hospitals and physicians
Provide public subsidies for essential clinical services and selected public health interventions
Significant
Moderate
Modest
No significant impact

medicine remains an important part of the health care system, governments could make greater use of traditional practitioners. Successful examples include the use of healers to screen for malaria and distribute antimalarial drugs in Thailand, promote modern contraceptives in Kenya, and distribute condoms in Zimbabwe and Uganda. Traditional birth attendants have also been enlisted to improve pregnancy outcomes in Bangladesh.

At the same time, governments can improve the equity and efficiency of their own health programs and facilities—thereby increasing their responsiveness to local needs—through decentralization and the use of managerial incentives. The gradual devolution of Chile's health system over the last decade shows that a measured process, accompanied by training and institutional development, can be successful.

Governments can also reap efficiency gains by converting public hospitals into semi-autonomous foundations or public enterprises, as Tunisia has done. These foundations or parastatals are less restricted by public sector procedures in managing their budgets and in hiring and firing staff, and they can recover costs and collect charitable donations for investments and operational costs. Increasing evidence suggests that the technical efficiency of government health facilities can be improved by contracting out ancillary services. In Venezuela, for example, health ministry hospitals contract out maintenance of large equipment, and social security hospitals frequently contract for laundry, gardening, food services, and security, as well as maintenance.

The way forward

The *WDR* points to the need for widespread and fundamental reform of health policies and health systems. It calls for changes in the level and composition of government spending for health; in public and private institutions responsible for delivering health services; and in insurance, cost recovery, and other mechanisms for financing health care.

A few developing countries are already on the road to reform. Malawi, Mauritania, and Senegal have committed themselves to devoting a larger share of government health spending to basic services and vital nonsalary items (e.g., drugs, transport, and maintenance). Chile is developing individual performance-based contracts for government hospitals. Hungary is strengthening its social security-based health insurance system. Moreover, a number of other countries (e.g., Colombia, Kenya, Mexico, Tanzania, and Uganda) have already shown an interest in testing the applicability of the *WDR*'s recommendations to their own national policies. If developing country governments can translate rhetoric into reform, the gains in human welfare in the coming years will be enormous. ■

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Designing an Essential National Health Package

JOSÉ-LUIS BOBADILLA AND HELEN SAXENIAN

DEVELOPING countries could reduce their current burden of disease by 25 percent if governments were to make an essential national package of health services available to everyone. This is well within the reach of most developing coutries.

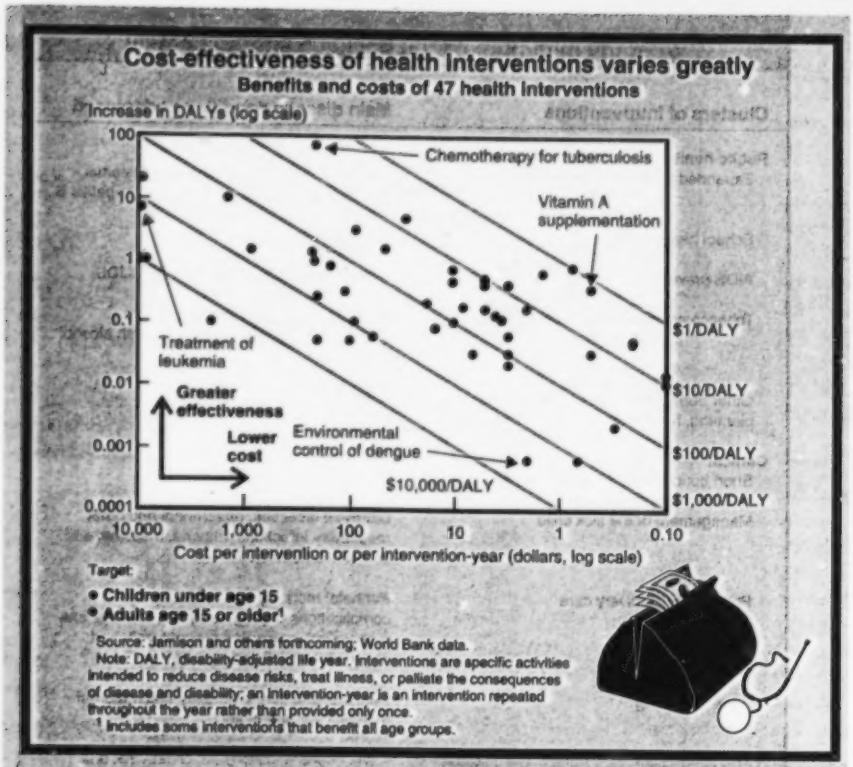
When it comes to health policy, one of the most difficult decisions for developing country governments to make is how best to put together a mix of health services that will be financed by public spending. Ideally, they would like to offer as much health care as possible to as many people as possible. But in practice, they end up concentrating resources in urban hospitals, which provide a wide range of services for a few, leaving other population groups, particularly in rural areas, with relatively little access. This allocation of public spending is inequitable and inefficient: costly treatments are prescribed that prolong life only slightly, while large populations are denied inexpensive services that extend life greatly, such as immunizations.

As a way of resolving this problem, the *World Development Report 1993* recommends that governments design and finance a national health package, embracing essential public health and clinical services that will substantially reduce the burden of disease (the present value of future streams of disability-free life lost as a result of death, disease, or injury) at affordable costs. This means that governments will need to review the value for money being obtained from the current mix of interventions they offer so that they can reallocate resources in the most cost-effective manner.

Value for money

No matter how health services are organized and paid for, what they actually provide are health interventions—specific activities meant to reduce disease risks, treat illness, rehabilitate, or palliate the consequences of disease and disability. Debates about whether health services should concentrate on "vulnerable groups" such as children, pregnant women, and the elderly, or about the relative roles of hospitals versus health centers, or about preventive versus curative activities, are at bottom debates concerning the proper mixture of interventions. In health, as in every other sector, customers want value for the money spent.

That is why the first step in designing a country's essential health package is to determine the cost-effectiveness of a health intervention—the net gain in health compared with doing nothing, divided by the cost. Indeed, the developing countries that have been the most successful in improving health for a given level of spending have concentrated their public monies on highly cost-effective interventions. These success stories include China, Costa Rica, Chile, Sri Lanka, and Thailand—all countries with different income levels and political systems.



When governments try to determine which interventions should be put in an essential national health package, they need to calculate the cost-effectiveness of the various possibilities. This chart shows the dollar costs and gains in DALYs for 47 key interventions.

Higher points represent interventions that are more effective in improving health as measured in DALYs saved; points farther to the right represent lower-cost interventions. Some interventions cost less than $1 per person benefitted, while others cost over $10,000. Some interventions add more than ten years of healthy life, while for others, the gain is equivalent to only a few hours or days of full health. Both axes are drawn on a logarithmic scale, so that the diagonal lines show equal cost-effectiveness ratios in dollars per DALY. These ratios vary widely, from as low as $1 per DALY to as much as $10,000. Higher lines represent more cost-effective interventions.

Four interventions illustrate the extremes of cost and health gain: vitamin A supplementation (low cost, high gain), chemotherapy for tuberculosis (high cost, high gain), environmental dengue control (low cost, low gain) and treatment of childhood leukemia (high cost, moderate gain).

How is cost-effectiveness determined? Given a common currency in which to measure cost and a unit in which to measure health effects, different interventions can be compared by what it costs to achieve one additional year of healthy life. Outcomes are measured in the same unit of disability-adjusted life years (DALYs) used to estimate the burden of disease. The ratio of cost and effect, or the unit cost of a DALY, is called the cost-effectiveness of the intervention; the lower that number, the greater the value for money offered by the intervention.

Despite the usefulness of this approach, to date, only a small share of the thousands of known medical procedures have been assessed for cost-effectiveness. Even so, the interventions that have been evaluated could deal with more than half the world's disease burden. Just implementing the 20 most cost-effective ones could eliminate over 40 percent of the total burden and three quarters of the health loss among children.

The *WDR's* cost-effectiveness estimates were largely drawn from "Disease Control Priorities in Developing Countries" (Jamison *et al,* forthcoming, World Bank), with the estimates based as far as possible on actual conditions in developing countries.

The *WDR* found huge differences in both the cost and the effectiveness of various health interventions, underscoring the importance of making such calculations (see chart). Indeed, because the value of interventions can differ so much, making allocative decisions badly costs lives. Spending $100,000 on chemotherapy for tuberculosis would achieve a gain of 35,000 DALYs, since about 500 patients would be saved, and they would be prevented from infecting others. But the same expenditure on diabetes management would save only 400 DALYs, because although 500 patients would benefit, each patient would gain less than one healthy year from a year of treatment, and there would be no significant benefits for others.

In addition, the results demonstrated that—confirming previous notions—many of the most cost-effective health interventions are preventive in character or fall into the category of primary care. For example, programs aimed at reducing childhood malnutrition and mortality, chiefly from infectious diseases, should continue to be supported by primary health care programs.

However, the findings also showed that not all preventive measures rank high in terms of cost-effectiveness (e.g., spraying to control the mosquitoes that carry dengue or malaria, and often water and sanitation investments), whereas several hitherto neglected interventions are very cost-effective: chemotherapy against tuberculosis; integrated prenatal and delivery care; mass programs to de-worm children; condoms plus information and education to combat AIDS; and measures against smoking, such as education and consumer taxes on tobacco products.

Content of the package

The *WDR* has come up with a suggested *minimum* package of health services, which is affordable by the majority of developing countries at current levels of health spending and would reduce the burden of disease by just over 30 percent in low-income countries. Eleven clusters of interventions or individual interventions are included in the package; apart from being cost-effective, these services address diseases responsible for a large share of the disease burden in developing countries (Table 1).

However, the exact content of each country's essential package will be largely determined by the epidemiological profile of the country (the distribution of disease burden across diseases) and the cost-effectiveness of the corresponding interventions. The size of the package (number of intervention clusters) will depend on the financial resources available for health care.

Clustering interventions improves cost-effectiveness through at least three mechanisms. Synergism between treatments or prevention activities is common, particularly in pediatric care. Joint production costs can substantially

reduce the amount of resources needed were interventions to be provided separately. And the optimal use of specialized resources, such as hospital beds, requires a screening process to refer the most severe cases from the first level of care to other facilities.

An efficient health cluster should include interventions that can be given to the same individual, at the same time, and through the same mode of delivery (outreach community health worker, health center, or hospital). The expanded program on immunizations, for example, is a very efficient one, because it includes six vaccines provided through the same delivery system to the same individual, often at the same time.

How would the proposed minimum package affect the various populations group? For children under five, who contribute disproportionately to the burden of disease, interventions to control the major diseases in early childhood are among the most cost-effective. Five of the 11 clusters produce large benefits for this group: the expanded program on immunizations, the school health program, family planning, management of the sick child, and prenatal and delivery care. The *WDR* did not consider the synergism likely to occur when these interventions are provided together, so the estimates are on the conservative side.

As for adults, the minimum package addresses three major risk factors, which together account for as much as 20 percent of the burden of disease in this group: tuberculosis infection, dangerous sexual behavior, and tobacco smoking. Tuberculosis in India and in sub-Saharan Africa is responsible for about 8 and 11 percent, respectively, of the burden of disease in those aged 15–59. Sexually transmitted diseases are one of the most important causes of disease burden in young adult women, with AIDS now exacerbating the problem. And in many middle-income countries (e.g., the former socialist economies and China), tobacco consumption is responsible for a large proportion of premature deaths, mainly due to lung cancer and cardiovascular diseases. This burden is likely to rise rapidly.

Regarding mothers, the good news is that maternal mortality and morbidity, which are responsible for 18 percent of the disease burden in women aged 15–44, can be effectively prevented in developing countries. The package includes two powerful clusters of interventions to reduce substantially the burden of disease associated with reproduction. Family planning could reduce the number of maternal deaths by 25 percent, and universal access to prenatal and delivery care, another 40–50 percent.

Clusters of interventions	Main disease conditions addressed
Public health	
Expanded program on immunizations	Measles, poliomyelitis, diphtheria, tetanus, whooping cough, yellow fever, and hepatitis B
School health program	Intestinal worms
AIDS prevention program	Sexually transmitted diseases and AIDS
Tobacco and alcohol control programs	Lung cancer, cardiovascular disease, cirrhosis, and injuries associated with alcohol abuse
Other public health programs (including family planning, health, and nutrition information)	These are not disease specific
Clinical	
Short course chemotherapy for tuberculosis	Tuberculosis in adults
Management of the sick child	Diarrheal diseases, pneumonia and other respiratory infections, malaria, measles, and severe malnutrition
Prenatal and delivery care	Perinatal mortality and morbidity, complications of pregnancy and delivery, low birth weight, unwanted pregnancies, and congenital syphilis and gonorrhea
Family planning	Perinatal and infant mortality and maternal mortality and morbidity
Treatment of sexually transmitted diseases	AIDS, syphilis, gonorrhea, chlamydia, and other sexually transmitted diseases
Limited care (mainly for adults)	Pain control, infection and minor trauma treatment, and advice to reduce chronic diseases

Source: *World Development Report 1993*, World Bank.

Costs and payment

For low-income countries, the minimum package is estimated to cost $12 a person per year (Table 2). This rises to $22 a person per year in middle-income countries. The differences are due mainly to different demographic structures, epidemiological conditions, and labor costs in the two settings. About one third of this would go for public health and two thirds for essential clinical or individual services. Under these assumptions, total cost for all developing countries would be about $60 billion, which is less than total public spending on health in those countries now and only about 4 percent of world total health care spending.

The cost of the essential package is best calculated at the country level in order to incorporate different epidemiological and demographic conditions and price-level differentials. It is clear, however, that in low-income countries, where governments typically spend about $6 per person for health and total health outlays are only about $14 per person, the affordability of the minimum package is problematic. This would require an increase in public spending for health, as well as a reorientation of current government health outlays away from discretionary, less cost-effective interventions to essential care. In middle-income countries, where public spending for health averages about $62 per person, the $22 minimum package is financially feasible. What is required is a political commitment to shift existing resources in the direction of public health and essential clinical care.

Middle-income countries with public health expenditures above $50 per person should expand the minimum package to cover interventions with slightly less favorable cost-effectiveness than those in the minimum package to address a wider spectrum of diseases and injuries. An essential package would logically address tropical diseases peculiar to the country (e.g., Chagas disease in Brazil) and include public health measures and clinical interventions to reduce injuries (mainly from motor vehicle collisions) and fight major noncommunicable diseases.

Who should pay for the essential package?

Country group and package component	Total current health spending per capita (dollars)	Cost of proposed package per capita (dollars)	Reduction of disease burden (percent)
Low-income countries	14	12	32
China	11	12	15
Middle-income countries	113	22	15
All developing countries	41	15	25
Public health	—	5	6
Essential clinical services	—	10	19

Source: *World Development Report 1993*, World Bank.
Note: China has been excluded from low-income countries because its cost per capita is assumed to be the same as that of a low-income country but its percentage reduction in disease burden is assumed to be the same as that of a middle-income country.
Data refer to 1990.

There are strong efficiency arguments for directing government funding to public health interventions, because of the public goods nature of these services. And a number of the essential clinical services, including treatment of tuberculosis and sexually transmitted diseases, have large positive spillover effects. In addition, there are equity grounds for financing the package. The poor are disproportionately affected by the disease burden the package addresses, making public finance of the package an effective mechanism for reaching the poor. The main problem with universal government financing of an essential package is that it leads to public subsidies to the wealthy, who can afford to pay for their own services, with the result that fewer government resources go to serve the poor.

One way to solve this problem is by targeting public spending to the poor. In low-income countries, where current public spending for health is less than the cost of the minimum package, some targeting is almost inevitable. In countries where the wealthy do not use government-financed services because of the greater quality and convenience of privately financed services, targeting may be fairly easy. In middle-income countries, where a significant part of the population may be covered by private or social insurance, governments can mandate that the essential package be covered by all insurance policies.

The most sophisticated facility required to deliver the minimum elements of the package is a "district" hospital, which serves as the first level of referral from health centers. These hospitals offer basic surgery, emergency services, and some outpatient care; generally have 100–400 beds; and serve 50,000–200,000 inhabitants. The minimum package requires access to health centers and district hospitals throughout the country. On average, it requires about 1 district hospital bed, 0.1 to 0.2 physicians per 1,000 population, and 2 to 4 nurses per physician.

Governments can direct public spending to support the nationally defined essential package in several ways:

Where services are *publicly financed and provided*, they can reallocate public spending toward inputs—drugs, supplies, equipment, staff, and facilities—that support the package. In many countries, extending the basic infrastructure throughout the country and improving the quality of services at existing lower-level facilities are necessary steps to delivering the package. At the same time, governments can eliminate or greatly reduce financing of inputs for less cost-effective services. This might include closing wards or converting specialized hospitals to serve as district hospitals and curtailing the number of specialist physicians. In Canada, for example, provincial governments—not individual hospitals—control the decision to acquire technically advanced diagnostic tools.

At the same time, providers' treatment decisions would not be micromanaged; they would be influenced, instead, by the nature of input availability. The specialized staff and equipment, for example, would not be available to treat certain highly fatal forms of cancer, but drugs would be available to provide pain relief. Similarly, staff, diagnostic services, equipment, and drugs would be available for treating malaria in young children. Budgetary and salary incentives could also be used to reward individual providers, facilities, or districts that achieved good coverage of the population with the services in the package.

Where services are *publicly financed but privately provided*, governments should reimburse only for those services in the essential package. This model of health care delivery is growing, but it is still uncommon in developing countries. At present the regulatory capacity to oversee such arrangements is poorly developed.

Conclusion

Adopting an essential national package of health interventions to be financed publicly, at least in part, and to be required of all privately financed insurance would help solve several problems in the allocation of health care resources.

- It would assure that public spending was concentrated on those interventions yielding the most health gain per dollar. This is not only good for health; it is likely to increase taxpayer satisfaction with the use of public money.
- By stating clearly what outputs the system is expected to provide, it would make it easier to estimate input requirements.
- It would clarify the boundary between public and private outlays, providing a basis for determining what to subsidize and what to leave to the private market.
- The definition of an essential package might also affect private spending by drawing attention to what is most cost-effective and regulating insurance accordingly.
- It would increase equity and help to either reduce poverty or alleviate its consequences by assuring that, at the least, the most justifiable health care is provided to the poor. ■

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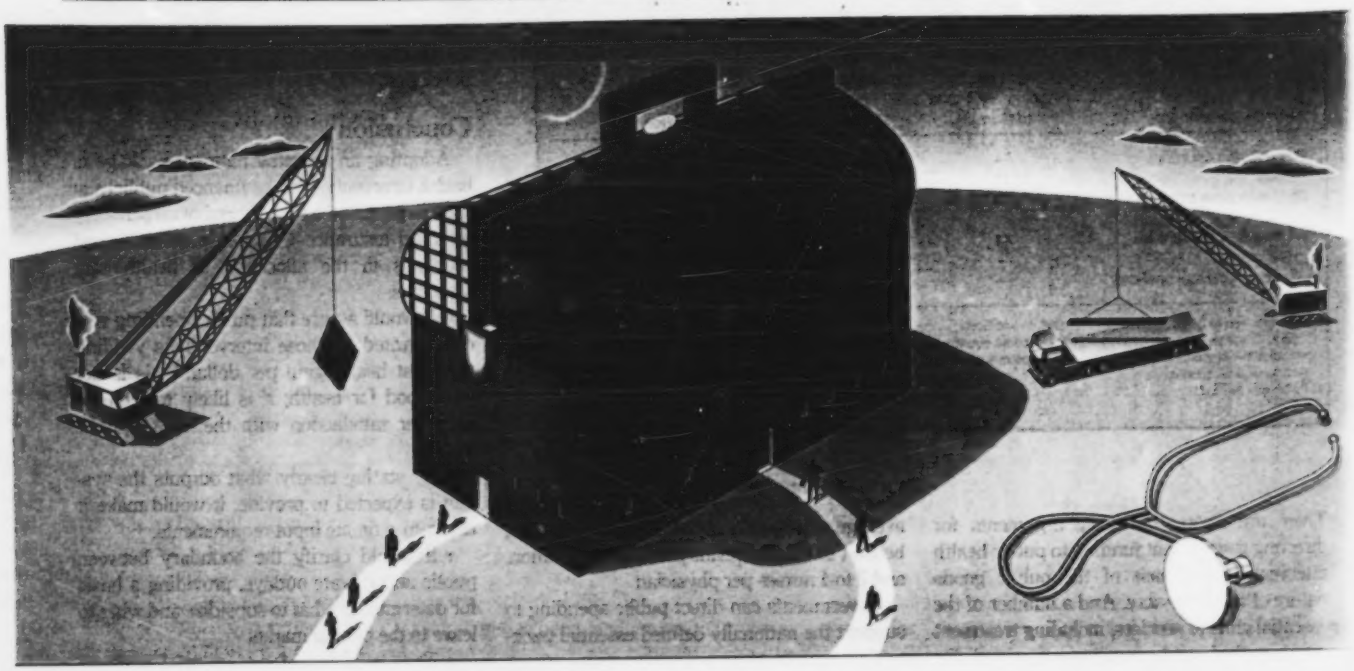


The Foundation for Better Health

JEE-PENG TAN AND KENNETH HILL

GOVERNMENT policies outside the health sector—particularly ones that affect the macroeconomy, poverty, education, and women—can make large contributions toward upgrading the health status of the population.

Health status differs greatly among the world's countries. Life expectancy currently ranges from 40 years or less in some countries of sub-Saharan Africa to 75 years or more in industrial countries. Even within regions, variations are large. In the early 1980s, child mortality was three times as high in Mali as in Botswana, and six times as high in Bolivia as in Chile. Rates of improvement have also varied by country. Between the early 1960s and the early 1980s, child mortality fell 20 percent in Bangladesh but 65 percent in Sri Lanka, and 10 percent in Haiti but nearly 80 percent in Costa Rica.

These enormous differences in health status and progress over time underscore the importance of public policy in shaping health outcomes. Climate and geography—which determine the range of diseases present—obviously affect health, but human behavior (interaction with health services) is also crucial. How people behave and what they can do is determined, to a great extent, by their income and knowledge. What then is the nature and strength of the link between these factors and health? And what can public policy do to strengthen people's capacity to achieve better health?

The *World Development Report 1993* argues that rapid income growth, particularly for the poor, in combination with investments in education, are critical in this regard. Because mothers play a central role in child care and household management in most countries, *WDR 1993* stresses the need for specific policies, particularly in education, to enhance women's capacity to achieve better health for themselves and their families. These policies work together to lay the foundation for better health.

Household capacity and health

Within the household, health improves rapidly as people escape from poverty and low education. Beyond the household, every society's health services are affected by its national income, and its ability to acquire and apply new scientific knowledge depends on the level of schooling.

The role of income. Throughout the twentieth century, life expectancy has been strongly associated with income per capita (as Chart 1 shows). At any time, the higher a coun-

try's average income per capita, the more likely its people are to live long, healthy lives. This effect tapers off as income rises: using the 1990 relationship, a doubling of income per capita (adjusted for purchasing power parity) from, say, $1,000 improves life expectancy by 11 years, whereas a doubling from $4,000 is matched by a gain of only 4 years.

Income growth has more impact in poor populations because additional resources buy basic necessities, particularly food and shelter, that yield especially large health benefits. The relationship between income and life expectancy has improved over the course of the century as advances in science and medicine have made it increasingly possible to realize more health for a given income.

Because poverty has a powerful influence on health, it is not just income per capita that is relevant—the distribution of income and the number of people in poverty matter as well. In industrial countries, life expectancy depends much more on income distribution than on income per capita, and it has been rising faster in countries with improving income distribution. Japan and the United Kingdom had similar income distributions and life expectancies in 1970, but they have diverged since then. Japan now has the highest life expectancy in the world and a highly egalitarian income distribution. In the United Kingdom, where income disparity has widened since the mid-1980s, life expectancy is now three years less than in Japan.

In developing countries, the variation in the prevalence of poverty and in per capita public spending on health goes a long way toward explaining differences in life expectancy. Moreover, the adverse effect of poverty on health can be seen in health differences across rich and poor neighborhoods and families, even within the same city. For example, in Madurai, the second-largest city in India's Tamil Nadu State, children ages 2–9 years in the poorest households were more than twice as likely to suffer from serious physical or mental disabilities as children from only marginally better-off families.

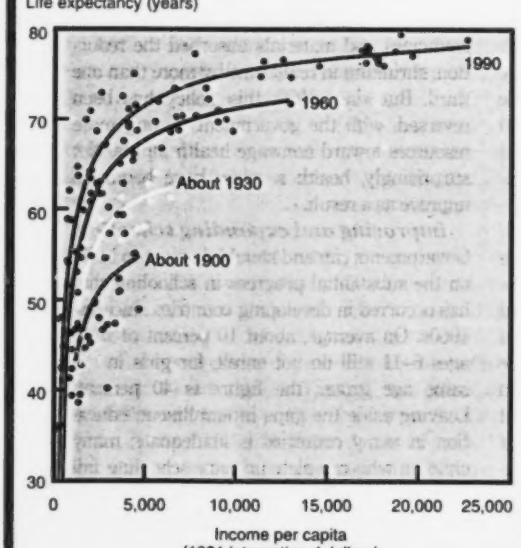
The strong link between income and health highlights the costs to health of slow economic growth. Child health has been improving everywhere, but the gains have been much smaller in countries with slow growth. In the 1980s—a decade characterized by constant or falling income per capita in developing countries—child mortality fell by almost 30 percent in countries where average incomes fell; in countries where average incomes grew by more than 1 percent a year, child mortality fell twice as much. Had economic growth been as fast in the 1980s as in the period between 1960 and 1980, in 1990 alone an estimated 350,000 deaths, or 6 percent of total infant deaths, would have been averted in developing countries, excluding India and China.

The role of education. Households with more education enjoy better health, both for adults and children. A mother's schooling is an especially powerful determinant of child health. In Peru, for example, seven or more years of maternal schooling reduces child mortality nearly 75 percent, or about 28 percent more than the reduction for the same level of paternal schooling. The advantages that a mother's schooling confers on her children's health are felt even before birth, and they continue to operate throughout the childhood years. Better-educated mothers marry and start their families later, diminishing the health risks of early childbearing. They also tend to practice better domestic hygiene and make more effective use of health services. In general, they are better at getting information on health and acting on it.

Among adults, health depends strongly on personal habits and lifestyles. Because educated people tend to make choices that are better for their health, there is often a strong relation between schooling and health. In Russia, death from coronary heart disease is two to three times as common among the poorly educated as among those with higher education. In Brazil, adults with primary schooling or less are about five times as prone to high blood pressure as those with postsecondary schooling. Educated people are quicker to modify their behavior as new health threats arise (such as AIDS) or in response to new information about health. In the United Kingdom, for example, the proportion of smokers among adults declined by 50 percent between 1958 and 1975 among the most educated, but hardly changed among the least educated.

Chart 1

Higher income and technological progress add to life expectancy



Source: *World Development Report 1993*, World Bank.
Note: International dollars are derived from national currencies, not by use of exchange rates but by assessment of purchasing power. The effect is to raise the incomes of poorer countries, often substantially. Data refer to all individual countries for which estimates could be made.

Strengthen household capacity

Given the strong links between better health and income and education, the policy implications are clear: governments should work to boost economic growth, reduce poverty, and expand schooling (especially for girls—one of the most effective ways of strengthening women's ability to care for their families).

Promoting growth and reducing poverty. It is difficult to reduce poverty without economic growth, so establishing sound economic policies is one of the most valuable things a government can do. This is exactly what many developing countries did in the early 1980s, as they tried to cope with severe external shocks and rectify misguided domestic policies. They adopted macroeconomic reforms to control inflation and to maintain sustainable external and internal monetary balance. They also undertook microeconomic and institutional reforms to promote the efficient use of resources.

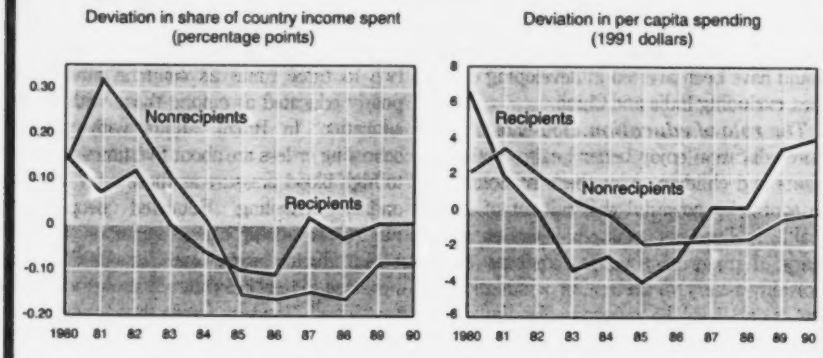
To support these reforms, the World Bank and the IMF have been extending adjustment lending, which is designed to cushion the transition to new and higher growth paths. This lending facilitates economic progress and, therefore, health gains in the long run.

How have adjustment programs affected health? Studies demon-

Chart 2

Public spending on health recovered faster in countries that received adjustment lending

Deviation from mean levels of public spending on health in countries receiving and not receiving adjustment lending



Source: *World Development Report 1993*, World Bank (Yazbeck, Tan, and Tanzi, background paper).

Note: Recipients of adjustment lending include countries that received two structural adjustment loans or three or more adjustment operations, all effective by June 1990, with the first operation effective in or before June 1986. Data were available for the following countries in this group: Bolivia, Brazil, Chile, Costa Rica, Kenya, Republic of Korea, Mauritius, Mexico, Pakistan, Philippines, Turkey, and Uruguay. Nonrecipients are countries that had not received adjustment lending by June 1990. Data were available for Burkina Faso, Dominican Republic, Egypt, El Salvador, Guatemala, Liberia, Malaysia, and Papua New Guinea.

strate that central government expenditure on health in countries with adjustment lending programs did not suffer more than elsewhere (although the outlays by states and local governments must also be taken into account). Indeed, comprehensive data available for 20 countries—which included these outlays—show that in countries with and without adjustment loans, public spending on health as a percentage of GDP declined in the early 1980s in relation to the average for the decade (Chart 2). But in 1985–90, health spending and per capita public health spending recovered faster in countries that were receiving adjustment lending.

What about the short-run effects of adjustment lending? Evidence from sub-Saharan Africa and Latin America suggests that the short-run economic downturns associated with adjustment programs do slow the rate of progress in improving health. However, the falls in income and the slowdown in health improvements are caused not by adjustment lending itself, but rather by the necessity for the country to change policies and curb consumption. Without adjustment loans, even greater decreases in consumption would be necessary.

Studies also show that the potentially adverse effects of adjustment programs on health in the short run can be cushioned by appropriate policies. In developing countries in which these programs were first implemented in the early 1980s, budget cuts tended to be indiscriminate, failing to preserve those elements of the health system with the strongest long-term benefits. In Côte d'Ivoire, for example, health expenditure was reduced in real terms by 12 percent between 1980–84 as part of the government's adjustment program. However, personnel costs were not cut; instead, public expenditures on scarce medicines and materials absorbed the reduction, shrinking in real terms by more than one third. But since 1990, this policy has been reversed, with the government putting more resources toward nonwage health inputs. Not surprisingly, health services have begun to improve as a result.

Improving and expanding schooling. Governments can and should do more to build on the substantial progress in schooling that has occurred in developing countries since the 1960s. On average, about 10 percent of boys ages 6–11 still do not enroll; for girls in the same age group, the figure is 40 percent. Leaving aside the gaps in enrollment, education in many countries is inadequate; many children who complete primary schooling fail to acquire basic literacy and numeracy skills or scientific understanding.

Clearly, governments should ensure that all children receive a minimum quantity of schooling—say 5,000 hours, or roughly 6 full years. Most pupils in developing countries currently receive much less than this minimum: in India, no more than one third of girls reach this level, and in China and Latin America, only 60 percent do. But this will require a significant and sustained policy effort. Government funding of schooling at the lower levels and for girls is especially justified, in part because the associated benefits for society are large. More spending alone, of course, is not enough. Whatever is spent must also be used efficiently. In some settings, allocating resources to improve the health and nutrition of school-age children may be an efficient way to improve schooling, not least because healthier children are more likely to learn better and persist in their schooling.

What can be done?

Around the world, much has already been done to enable people to live longer, healthier lives. The achievements of the past point to the requirements of the future. According to World Bank projections, income per capita in sub-Saharan countries will grow by only 0.8 percent a year over the next ten years. But even this modest increase will bring about a decline in the infant mortality rate of 2–4 percent. In South Asia, where faster growth (3.3 percent a year) is projected, infant mortality declines of 15 percent can be expected. These benefits can be powerfully reinforced by better education. In India and Kenya, for example, 2 maternal deaths and about 45 infant deaths would be averted for every 1,000 girls provided with 1 extra year of primary schooling. Policies that promote economic growth, reduce poverty, improve schooling, and empower women play a crucial role in health because they enhance people's ability to choose healthier lifestyles. ■

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Structural Reforms in Arab Countries

MOHAMED A. EL-ERIAN AND
SHAMSUDDIN TAREQ

TO EXPLOIT their considerable economic potential in the remainder of the 1990s, Arab countries will need to continue addressing structural weaknesses in their economies.

Despite having achieved important gains in recent years, many Arab countries remain subject to internal and external constraints that frustrate the full realization of their considerable economic potential. Accordingly, there is growing recognition among policymakers in the region of the need to strengthen the economic performance of these countries in a sustainable manner. This would involve implementing comprehensive measures to mobilize additional productive resources and to use them more efficiently.

Structural policy issues

The exact nature and magnitude of the structural policy challenges facing Arab countries vary depending on the country being considered. In addition to differences in economic and financial conditions—including the degree to which they were affected by the 1990–91 Middle East crisis—countries differ in the extent to which they have already embarked on comprehensive adjustment and reform programs. Nevertheless, many of them face similar policy challenges in the structural reform area. Such challenges are accentuated by rapid population growth in some countries, concerns about water supplies and oil price prospects, and the uncertain international environment facing the region. Several countries have responded to these challenges by implementing policies that address their basic structural weaknesses, while others are designing such policies.

Reforming public enterprises. An important feature of many Arab countries has been the dominant role played by the public sector.

The economic performance of public enterprises in Arab countries, however, has been disappointing in many cases. Earnings have tended to fall short of current financial obligations and do not provide for an adequate return on capital. In addition to direct transfers from the budget to cover losses, some of the enterprises have been provided with subsidized inputs and credit, further straining budgetary and monetary balances. In some countries, the banking system's nonperforming claims on public enterprises have also weakened the integrity of the financial system.

As a result, some countries have provided enterprises with greater autonomy and accountability and have begun privatizing and financially restructuring them. While the scale of such policies has, on the whole, been limited relative to several other developing countries—reflecting institutional constraints, concerns about the absorption of surplus labor, and difficulties in addressing the large financial obligations of certain enterprises—a range of measures has been implemented. For most Arab countries, the initial step has involved assessing the financial viability of the enterprises and, in several cases, the rationale for public ownership and control. The next step has involved measures that range from a targeted privatization program (Tunisia) to the use of a holding company construct (Algeria and Egypt), transfers to workers' cooperatives (Libya and Somalia), selected sales of shares (Oman, Qatar, and Saudi Arabia), use of management performance contracts (Algeria), and assumption by the central government of nonperforming enterprise obligations to the banking system (Mauritania).

Other fiscal sector reforms. The dominant role of the public sector has also been reflected in the structure and size of the central government budget. Almost all Arab countries have had to address large budgetary deficits, including oil economies, where the sharp decline in oil prices in the mid-1980s exposed the vulnerability of the fiscal accounts. In addition to containing appropriate expenditure (with emphasis on cutting nonproductive and low priority outlays), the needed effective and permanent reduction in fiscal imbalances has required measures that improve the structure of revenues. Without these, a series of politically difficult fiscal adjustments would be needed periodically to prevent the re-emergence of unsustainable fiscal imbalances—adjustments that, in the past, have tended in some countries to excessively constrain productive outlays on social sectors and infrastructure.

The key elements of tax reforms recently implemented in some Arab countries have included simplifying the tax system and rendering it more transparent, improving its buoyancy and elasticity, reducing antiproduction and anti-export biases, enhancing the redistributive features, and reducing the vulnerability of tax collections to adverse external terms of trade movements. This has involved reforming direct and indirect taxes and seeking to decrease the countries' reliance on international trade taxation. The most comprehensive direct tax reforms, implemented in the Maghreb countries, have provided for a broadening of the tax base, elimination of multiple taxation of corporate profits, taxation of all individual income under the same tax schedule, rationalization of exemptions, and introduction of current year payments of realized tax liabilities among other things. On the indirect tax side, they have involved the replacement of various levies by a value-added tax.

Other measures affecting indirect taxation have included the adoption of sales and consumption taxes (Egypt and Jordan, respectively) and shifting excises from a specific to ad valorem basis (Mauritania).

Financial sector reforms. As in other developing countries, the reform challenges in the financial sector of many Arab countries include three elements: rationalizing the deposit and lending rate structure, deepening money and capital markets in the formal sector of the economy, and strengthening prudential regulation and supervision. Such steps have implied a fundamental move away from systems characterized by strict controls over the rate structure supplemented by quantitative limits on the overall and sectoral allocation of credit. These systems had their origin in the desire to prevent usurious rates and provide instruments to channel credit to sectors deemed to constitute a national priority. In many cases, however, they contributed to financial disintermediation, currency substitution, and credit rationing.

A number of Arab countries have substantially liberalized their rate structures (Algeria, Bahrain, Egypt, Jordan, Morocco, and the United Arab Emirates). At the same time, steps were taken to move away from quantitative restrictions and toward indirect monetary control. Some Arab countries have also taken measures to strengthen capital markets. In addition to widening the scope of such measures, further steps are needed to deepen money and capital markets. In several cases, this would involve renewed efforts at institution building and improving existing procedures for governing trading, accounting, and reporting systems. Finally, appropriate strengthening of the prudential, regulatory, and supervisory regimes is important to counter potential risks arising from liberalization that could affect the integrity of the financial system.

Other domestic and external liberalization measures. Recognizing the adverse impact of rigid systems of administered prices, several Arab countries (e.g., Egypt and Sudan) have taken steps to liberalize their domestic pricing systems. Moreover, steps have been taken to address the multiplicity of same-product prices (e.g., Syria). Nevertheless, the process, while advancing, is not complete in many countries. As a result, the objective of establishing a "level playing field"—both operationally and legally—for private and public sectors is still some distance away.

The emphasis on public-sector led growth in the Arab region was also associated with an import-substitution strategy. Consequently, sluggish domestic competitive forces were compounded by a weakening of the disciplinary role of international competition. For most non-oil countries, the resulting inefficiencies in the tradeable sector were accompanied

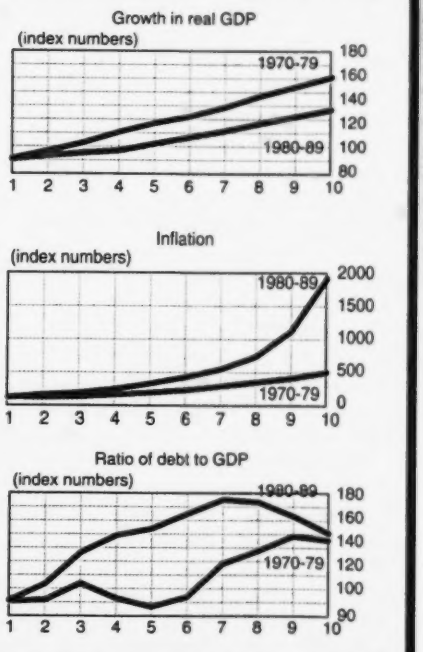
Developments in the 1980s

For developing countries as a whole, the decade of the 1980s was a relatively disappointing one, characterized by considerably weaker economic performance compared with the 1970s (Chart 1). Specifically, economic growth was lower, consumer prices increased significantly faster, and external debt increased despite the curtailment in voluntary financing. Performance varied significantly among regional groupings, however, with the economies of Asia faring considerably better than those of Africa and Latin America.

The performance of Arab countries during the 1980s was mixed relative to that of developing countries as a whole. Real GDP expanded at an annual average of some 2 percent (Chart 2) which, in the context of a relatively high population growth, implied a decline in per capita income of some 1 percent a year. Inflation performance was considerably better than that for developing countries as a whole, notwithstanding the acceleration in the latter part of the decade (Chart 3). Finally, the group's current account position improved after 1984, despite the sharp decline in exports resulting from lower oil prices (Chart 4).

As with the developing countries, macroeconomic aggregates for Arab countries as a whole conceal important differences among individual countries—countries which differ (substantially in some cases) in their natural resource bases, labor endowments, and financial resources. This is most apparent when comparing oil and non-oil countries' growth performance—and despite strong interrelationships among the two groups as a result of remittance and aid flows, among other things. As would be expected, the fall in oil prices, compounded by a reduction in production and exports, affected growth performance in oil countries more severely. Thus, while non-oil countries' per capita income gains exceeded those of developing countries as a whole, the oil countries recorded negative rates in several years during the 1980s. The non-oil Arab countries' inflation performance was also better than that of developing countries as a whole but fell short of that of their oil neighbors.

Chart 1
Developing countries' economic performance weaker in the 1980s



Source: International Monetary Fund, Data Fund.

by pronounced vulnerability to adverse developments in international prices and demand conditions. In light of these tendencies, most Arab countries have begun to liberalize their external sectors, in particular by relaxing quantitative and tariff trade barriers, reforming the exchange and payments system, and enhancing foreign direct investment inflows.

Protecting vulnerable segments of the population. A sound macroeconomic framework is essential to alleviate poverty. At the same time, there is growing recognition of the potential short-term adverse effects of adjustment and reform policies on the economically most vulnerable segments of the population. Therefore, reform efforts in Arab countries have increasingly included specific measures to protect vulnerable segments of the population. These have included comprehensive safety net systems (Tunisia), direct cash transfers (Algeria and Jordan), improved targeting of food subsidies (Jordan), and food-for-work programs (Mauritania). Some countries have also set up special funds which, with assistance from external creditors and donors, seek to finance projects designed to mitigate the adverse impact of adjustment and reform measures on dislocated segments of the labor force (e.g., the Social Fund in Egypt and the Employment and Development Fund in Jordan). ■

This article is based on a longer paper presented at a seminar on "Prospects of Arab Economic Development in the Nineties," organized by the Arab Fund for Economic and Social Development and the Arab Monetary Fund in Bahrain on February 1–3, 1993. The paper will be included in the proceedings of the seminar edited by Said El-Naggar and published by the International Monetary Fund (English edition) and the Arab Fund for Economic and Social Development (Arabic version).

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Chart 2
Growth of real GDP*

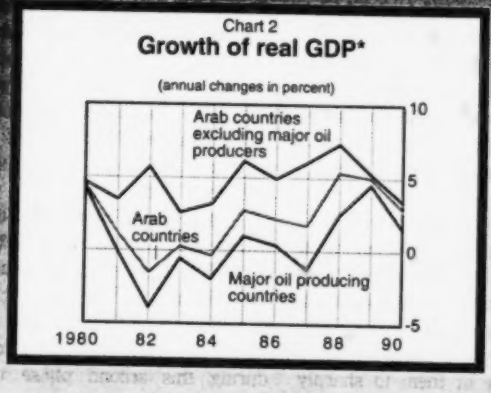


Chart 3
Consumer prices

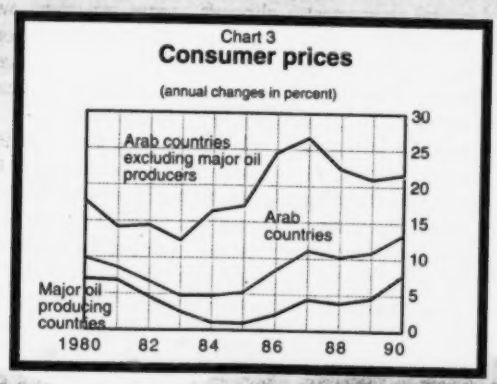
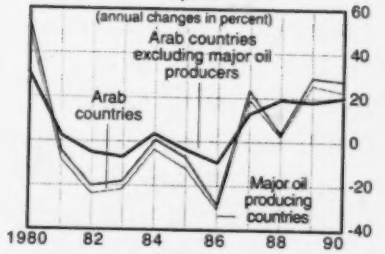
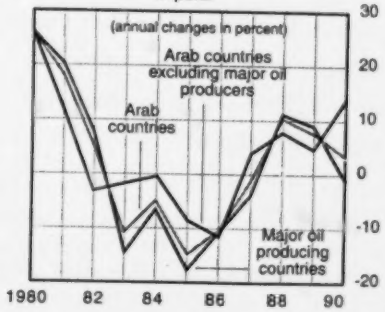


Chart 4
Improvement of current account position in Arab countries

Exports



Imports



*Aggregates for Arab countries in this and other charts are compiled on the basis of computed GDP-weighted averages for countries of the Arab League for which comprehensive data are currently available.
Note: For the purposes of the analysis, oil countries are defined as those deriving more than half of their domestic output from the extraction of crude oil. The group includes Algeria, Bahrain, Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Structural Adjustment in Sub-Saharan Africa

SALEH M. NSOULI

IN 1986 the IMF's Executive Board established the structural adjustment facility (SAF)—augmented in 1987 by the enhanced structural adjustment facility (ESAF)—to provide balance of payments assistance on concessional terms to low-income developing countries. Since 1986, 30 African countries have made use of the SAF and ESAF. It is now time to review the experience of these countries with macroeconomic and structural adjustment and to seek the lessons that might be drawn from that experience.

Buffeted by an adverse international economic environment, a heavy debt burden, droughts, a weak administrative and physical infrastructure, and political and civil strife, the African continent faces formidable challenges to achieving satisfactory and sustainable growth. While a number of African countries have made substantial progress in recent years in addressing the structural bottlenecks and financial imbalances that constrained their growth capacity, other sub-Saharan African countries are still confronting serious economic and financial crises, either because of a reluctance to embark fully on the road to reform or due to a difficult political situation.

This article briefly outlines economic and financial developments in sub-Saharan Africa over the last two decades. It explains the design of structural adjustment programs supported by the SAF and ESAF and reviews the experience of sub-Saharan African countries implementing them. It concludes with some of the lessons emerging from that experience.

Three phases

During the past two decades, economic and financial developments in sub-Saharan Africa exhibited three basic phases. During the first, from 1973–79, African countries generally witnessed a major improvement in their terms of trade, prompting many of them to sharply expand both current and capital government expenditure and resort to heavy domestic bank and external borrowing. The emerging financial constraints, nonetheless, began manifesting themselves in an accumulation of public sector domestic and external debt and payments arrears. Concurrently, monetary policy accommodated an expansion of private sector credit, while the regulated low interest rate levels discouraged financial savings and contributed to a misallocation of resources. The impact of the expansionary financial policies was aggravated by inappropriate structural policies. Most African countries established large but inefficient public enterprise sectors; expanded the scope of price controls and subsidies; and, with increasingly overvalued exchange rates, intensified exchange and trade restrictions that led to the emergence of widespread parallel markets for goods and foreign exchange. By the end of the 1970s, the sub-Saharan African countries were facing a major economic and financial crisis.

During the second phase, from 1980–84, many African countries tried to cope with the crisis in the face of a deteriorating external environment. A second round of oil price increases in 1979–80 and a recession in the industrial countries contributed to a 12 percent decline in the terms of trade of sub-Saharan Africa in the three years from 1980–82 before recovering somewhat in 1983–84. In addition, the rise in international interest rates in the early 1980s exacerbated their debt service burden. Furthermore, the worst drought in 15 years hit large parts of sub-Saharan Africa during 1982–84. The adjustment efforts of the African countries during this second phase were sporadic, although some progress was achieved. Economic activity picked up somewhat, inflation moderated, and the average external current account deficit, excluding grants, narrowed.

The third phase, from 1985–92, was characterized by a deepening of the structural adjustment efforts on the part of a number of African countries in the context of a severely depressed international economic environment. During this period, sub-Saharan Africa witnessed one of the most severe shocks to its terms of trade, which fell by some 40 percent; industrial country growth slowed considerably in 1990–92; civil unrest created serious economic disruptions in a number of countries; and a drought in southern Africa that began in 1990 took an immense toll on

agricultural output and exports. Thus, notwithstanding the adjustment efforts of a number of countries, economic growth—which had risen to an average annual rate of over 3 percent during 1986–89—dropped to an annual average rate of about 1 percent during 1990–92 (for sub-Saharan Africa, excluding South Africa, Nigeria, Sudan, and Zaïre, as the latter three countries bias the averages substantially during this period); the average external current account deficit, excluding official transfers, widened from about 7 percent of GDP in 1984 to about 12 percent in 1992; and the average rate of inflation continued to hover around 15 percent annually. These averages, however, conceal wide variations in performance of different groups of African countries, and, in particular, the progress made by several countries that tenaciously implemented structural adjustment programs.

Program design

The increased momentum for structural adjustment in sub-Saharan Africa in the second part of the 1980s was driven by a recognition of the need to tackle deep-rooted structural problems and financial imbalances and to counter the adverse effects of a difficult external environment. Between 1986 and 1992, 30 sub-Saharan African countries adopted adjustment programs under the SAF and ESAF arrangements.

In the context of these new facilities, the design of *comprehensive programs* benefited from the enhanced collaboration between the IMF and the World Bank, with the staffs of the two institutions providing advice in their respective areas of expertise. The discussions surrounding the formulation of policy framework papers, which set out the medium-term objectives, policies, and financing needs for each country, also helped foster a political consensus within many of the countries. In addition, the concessionality of the resources provided under the SAF and ESAF was important for the low-income sub-Saharan African countries, which were already facing heavy debt service burdens. The programs also helped catalyze additional bilateral and multilateral financial assistance, including debt relief on increasingly concessional terms, with the result that virtually all sub-Saharan African countries implementing programs supported by the SAF and ESAF witnessed an increase in net resource transfers.

The key objectives of structural adjustment programs were to achieve a satisfactory and sustainable rate of economic growth, reduce inflation, and attain a viable balance of payments position over the medium term. Even though the broad objectives and policy instruments were generally similar, each program was tailored to the particular circumstances of the country, taking into account the government's specific quantitative objectives, the intensity with which each policy instrument was to be used, the institutional and administrative setting, and potential financing.

In the design of these programs, achieving domestic and external financial stability was seen as an important ingredient for a sustainable rate of economic growth. If a country had high levels of inflation, reflecting excess demand pressures, savings and investment would be discouraged, leading to a drop in economic growth. Similarly, if a country faced continuous external imbalances, the ensuing shortage of foreign exchange could result in a curtailment of essential imported inputs, undermining the domestic industries.

"In the design of these programs, achieving domestic and external financial stability was seen as an important ingredient for a sustainable rate of economic growth."

Although the programs were designed within a medium-term framework, most were geared toward enhancing economic growth, even over the short run. In certain countries, however, where the economy had overheated because of unsustainable expansionary policies, the programs envisaged a temporary slowdown. Similarly, while most programs were designed to reduce inflation during the adjustment period, some foresaw an initial rise in inflation to allow for the impact of exchange rate adjustments and price decontrols. Most programs also aimed at reducing the external current account deficit during the program period, but some did envisage an increase in the deficit—to be covered by additional external financing—to accommodate the added investment and the liberalization of the exchange and trade system.

The programs designed during 1986–92 were characterized by a comprehensive range of policies involving (a) structural measures to increase productivity and promote capital formation by reducing distortions and physical bottlenecks; (b) macroeconomic policies to align aggregate demand with available resources, mobilize savings, and release resources to the private sector; and (c) social safety nets to protect the most vulnerable groups of the population and mitigate the transitional costs of adjustment.

The experience

The most significant aspect of the adjustment efforts of sub-Saharan African countries during 1986–92 was the progress they made toward liberalizing their economies, with a view to enhancing incentives and the efficient utilization of scarce resources. Virtually all the African countries that implemented structural adjustment programs supported by SAF and ESAF arrangements gave high priority to liberalizing pricing and marketing policies. In this regard, given that the highest potential for growth in sub-Saharan Africa is in the agricultural sector—which employs most of the population, generates the bulk of value added, and, in a number of cases, accounts for an important part of exports—producer prices were reviewed or liberalized to send the right signals to producers and consumers, while marketing arrangements were reassessed to avoid trade monopolies.

These actions were reinforced with appropriate external sector policies. Given the importance of the exchange rate in allocating resources and regulating absorption, many African countries, excluding those pegging their currencies under monetary arrangements, adjusted their exchange rates to reflect market conditions; some adopted various forms of floating exchange rate regimes. In this context, governments paid particular attention to the sequencing of policies. The adjustment in exchange rates to equilibrate the demand for and supply of foreign exchange was supported by appropriate demand management policies, thus providing the basis for many African countries to reduce exchange and trade restrictions and streamline their customs tariffs.

The overextended public enterprise sectors had become a major drain on the economy of a number of African countries, putting pressures on both the government budget and bank credit. The programs, therefore, generally included actions to rehabilitate, privatize, or liquidate public enterprises. While a limited number of countries made progress in this

area, most countries lagged seriously behind, as inadequate preparatory work, limited financial intermediation, and political pressures hindered the process.

Virtually all programs included measures to strengthen development planning, with a view to ensuring that the investment strategy was consistent with the overall macroeconomic objectives, the rate of return on projects was carefully evaluated, and the recurrent cost and debt servicing implications were taken into account. However, while reviews of investment programs succeeded in weeding out the most unsuitable projects, they were generally not sufficiently comprehensive to allow for a full evaluation of all the projects.

All programs involved structural measures to increase government revenues and rationalize expenditures. The programs included wide-ranging reforms of the tax system designed to enhance its elasticity, broaden its coverage, and improve the distribution of the tax burden. Many programs also aimed at reducing the share of the government wage bill through a restrained incomes policy, strict limits on employment, and, in some cases, a retrenchment in the civil service under voluntary departures schemes. The programs also attempted to curtail lower priority expenditure, improve the efficiency of maintenance and investment outlays, reduce subsidies, and increase the share of expenditure for social services. Even though slippages occurred, most countries made progress in fiscal reform. Under the programs supported by the SAF and ESAF, there was an improvement in the fiscal balance relative to the three-year period preceding the programs in nearly two-thirds of the African countries.

The reduction in fiscal deficits and the improvement in the financial situation of public enterprises allowed the monetary authorities to redirect credit to the private sector, while restraining monetary growth. Major reforms of financial markets, institutions, and the regulatory framework undertaken also strengthened the allocation of financial resources. Those reforms enhanced the role of the market in allocating credit, notably by abolishing interest rate ceilings or floors or removing bank-specific or sector-specific quantitative ceilings on credit; they also strengthened the banking systems by restructuring banks, improving prudential regulations, and reinforcing bank supervision.

SAF- and ESAF-supported programs paid increasing attention to poverty and the social aspects of structural adjustment programs. In general, the programs provided targeted assistance for the most vulnerable groups of society. Some structural measures taken in the context of programs, such as an increase in agricultural producer prices that redistributed income to the poorer rural areas, improved the economic situation of the poor directly. In addition, many programs provided for increases in outlays for health and education. To ease the short-term impact of certain adjustment measures, programs often included specific compensating measures. For example, when policies involved a reduction in public employment, severance pay was provided and retraining programs were offered. Over the medium term, the reform programs, by promoting growth and increasing employment opportunities, were seen as the best insurance for improving living standards.

	Pre-program three-year annual average	Program annual average
GDP growth	(percent)	
A	2.3	4.1
B	2.2	3.5
Inflation	(percent)	
A	27.5	17.5
B	26.9	26.3
Overall fiscal balance[2]	(percent of GDP)	
A	−13.9	−11.4
B	−13.5	−13.5
Current account balance[2]	(percent of GDP)	
A	−15.6	−16.1
B	−15.0	−17.5
Gross international reserves	(months of imports)	
A	2.5	2.8
B	1.8	2.6

Source: Data provided by countries and IMF staff estimates.
A: Countries with sustained program implementation.
B: Including those with interruptions.
[1] Covers sub-Saharan African countries that had completed annual programs or reviews under SAF and ESAF arrangements by May 31, 1992.
[2] Excluding grants. Includes effects of trade liberalization, in the case of the external current account, and of structural reform expenditures, in the case of the budget, made possible *inter alia* by increased external financial assistance in support of the programs.

The results

Although the experience with policy implementation has varied across countries, a recent evaluation of the progress made under SAF/ESAF arrangements for 30 sub-Saharan African countries during the program period (relative to the three-year pre-program period) shows that there was an improvement in growth performance in nearly two-thirds of the cases, a reduction in inflation in about the same proportion, an improvement in the external current account in nearly two-fifths of the countries, and an increase in international reserves in over two-thirds of the countries. In addition, many sub-Saharan African countries implementing programs managed to reduce or stabilize their ratio of gross external debt to merchandise exports through a combination of improved export performance, prudent debt policies, and debt cancellation. The Gambia, Malawi, Mozambique, Senegal, and Togo, in particular, succeeded in reducing their debt ratios, while Ghana, Guinea, Kenya, and Mauritania stabilized theirs.

These results are all the more remarkable if the factors that adversely affected performance are taken into account. Of the African countries with SAF/ESAF arrangements, about half had arrangements that were interrupted for a cumulative period of more than one year. In general, countries that sustained policy implementation, promptly adapted their policies to a changing environment, and sequenced their policies appropriately made greater progress than those that did not (see table). The interruptions also suggested that the political consensus may have waned during the course of the program, possibly as the initial crisis atmosphere subsided.

In addition, a number of countries suffered from adverse climatic conditions. Burundi, the Central African Republic, The Gambia, Ghana, Kenya, Lesotho, Mozambique, Rwanda, Sao Tomé and Principe, Senegal, and Uganda suffered particularly in this respect. Furthermore, many of the African countries were hit by a sharp deterioration in their terms of trade, with the most substantial drops occurring in Burundi, Equatorial Guinea, Ghana, Guinea-Bissau, Kenya, Madagascar, Mauritania, Mozambique, and Uganda.

In many cases, program implementation was constrained by a limited administrative and institutional infrastructure, while program monitoring was hindered by data deficiencies. Program implementation was also hampered frequently by delays or shortfalls in the receipt of external financial assistance, resulting mostly from the administrative procedures in certain creditor countries or from the recipient country's lack of performance under certain sectoral or program loans. In some cases, concerns regarding governance also led to shortfalls in financial assistance.

Finally, a number of countries suffered to different degrees from political instability, internal conflicts, and border problems that contributed to program slippages. Program implementation in 5 countries was somewhat adversely affected by political instability or border conflicts, while in 14 countries it was affected considerably more.

The lessons

The benefits of the adjustment policies pursued in recent years in a number of African countries will take time to materialize fully, given the inherently long gestation period of structural reforms. In the period ahead, however, there is a need to deepen those reforms, even in the countries that have already made significant progress. These countries are discovering the ***layering effect***—that is, as some of the more obvious and urgent problems are tackled, a second layer of problems that were not as evident initially become more binding. For instance, as public sector imbalances were reduced and external sector policies liberalized, the problems of financial intermediation assumed greater importance in many African countries in holding back the expansion of private sector activity. Other African countries that have so far been reticent in their efforts to reform can draw inspiration from the successful experience of the adjusting countries. Furthermore, it is to be hoped that, once the situation stabilizes in those countries going through political crises or civil strife, they will embark on the road to reform. It is clear from the recent experience that headway has been made in tackling some of the major challenges of sub-Saharan Africa that were foreseen for this decade. Yet the major long-term issues that constrain development in the African countries—the high rates of population growth, the degradation of the environment, and the limited human capital and institutional capacity—still remain to be tackled.

It is not easy to generalize from the experience of African countries pursuing structural adjustment, as the progress made has varied considerably from country to country and as the challenges facing the countries differed significantly. Furthermore, it is not feasible to isolate the impact of policies from that of other factors. Nonetheless, there are some lessons that can be drawn from this experience.

First, ***comprehensive policy packages are essential***. The countries that made the most headway were those where structural reforms and macroeconomic policies reinforced each other, contributing to increasing efficiency, promoting investment, mobilizing domestic savings, and aligning aggregate demand with available resources. The combination of structural reforms and appropriate macroeconomic policies can foster private sector investment through a reduction in distortions, an improvement in production incentives, and the enhancement of confidence through a stable economic environment.

Second, ***the appropriate sequencing of policies can enhance the effectiveness of the adjustment effort***, as it takes into account the complementarity of instruments and the need to support certain actions with others. For instance, the liberalization of exchange and trade restrictions had to be preceded or accompanied by macroeconomic and exchange rate policies to align aggregate demand with available resources, if such a liberalization was to be sustained.

Third, ***the preparation of reforms should be thorough***. The experience of the African countries in particular with regard to the restructuring of the public enterprise sector suggests that the preparatory work—in terms of auditing the enterprises and developing a strategy for their restructuring—was often inadequate and that the time frame envisaged for privatization did not fully take into account the time needed for completing the process and the feasibility of generating the requisite domestic financial resources or attracting the necessary foreign financing.

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Fourth, ***the continuity of policymaking is critical to the success of the adjustment efforts***. The experience of the sub-Saharan African countries shows that those countries that followed off-again, on-again adjustment policies eroded, during the relaxation phase, much of the progress achieved during the adjustment period.

Fifth, ***the prompt adaptation of policies to a changing economic environment is a key ingredient of successful adjustment***. While many of the countries in Africa were confronted with adverse shocks, it is those that reinforced their policies rapidly that were able to keep their adjustment efforts on track.

Sixth, ***the building and maintenance of a consensus and the implementation of safety nets can help strengthen the support for and the commitment to adjustment***. With the institution of the SAF and the ESAF, the internal dialogue generated by the need to elaborate policy framework papers contributed to the formation of a shared vision of the future among policymakers. Unfortunately, the political commitment generated by this initial consensus was not always sustained over the adjustment period. At the same time, delays in implementing actions to protect the most vulnerable groups from the transitional costs led in certain cases to increased resistance to adjustment.

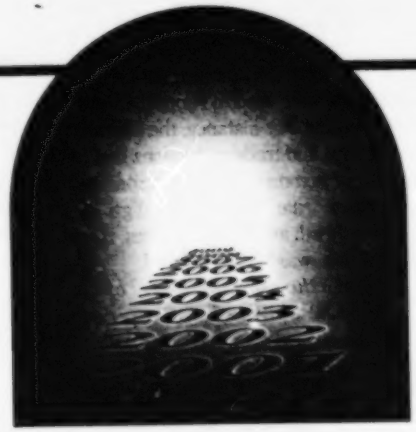
Seventh, ***the reinforcement of the administration and of institutions is essential for effective program implementation***. Quite often the progress made in putting in place reforms was hindered by a weak administrative and institutional base. Adjustment programs need to include explicitly technical assistance to help in the buildup of the administration and institutions that, over the long run, will be able to conduct economic policy effectively.

Eighth, ***an improvement in the data base can help strengthen the design of programs and the monitoring of progress***. The lack of timeliness and the spotty coverage of the data base have resulted, in some instances, in an incomplete identification of problems at the time of policy formulation and in delays in reacting to policy slippages or changing economic conditions.

Ninth, ***there is a need to further improve the coordination of foreign financial assistance to support reforms***. While the policy framework paper has provided a convenient vehicle for identifying the financing needs of a country in the context of a comprehensive reform program, a number of African countries, even after securing the requisite commitments, have experienced shortfalls that complicated their internal economic management.

Tenth, ***good governance is an important element for the success of the adjustment effort***. The implementation of policies and the fostering of an environment conducive to enhancing resource mobilization and investment require the sustained political stability that only good governance can ensure. Interestingly, experience in Africa shows an interaction between political and economic conditions—with political stability fostering good economic conditions and vice versa.

The sub-Saharan African countries deepening their reforms or embarking on new ones can draw on the accumulated experience of those countries that have made progress. IMF Managing Director Michel Camdessus has noted that there is a broad consensus among the members of the IMF that the ESAF has proved to be an effective mechanism for Fund support of the reform efforts in low-income countries and that a successor facility needs to be established. In this regard, all efforts are being made to make this instrument even more effective in light of the lessons of experience. ■



Ghana: 2000 and Beyond

AJAY CHHIBBER AND CHAD LEECHOR

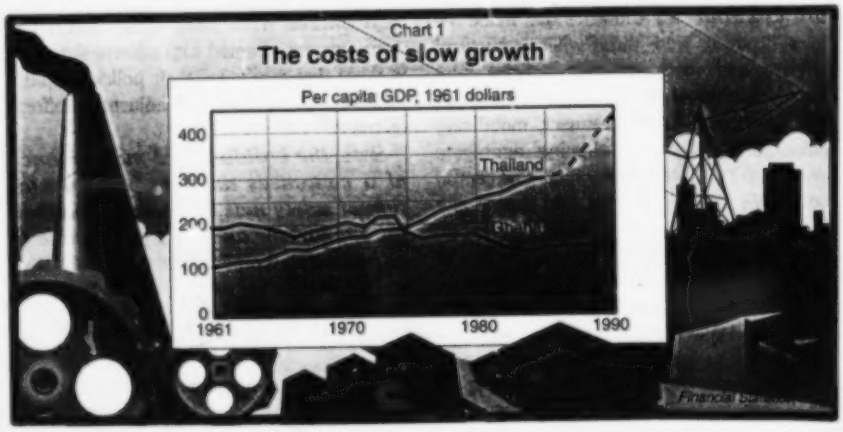
GHANA, one of the first African countries to gain independence, was the first to pursue intensive economic adjustment. Can it now become the first to accelerate growth and, at the same time, reduce poverty? The dynamic growth in East Asia provides some lessons for Ghana and for countries in sub-Saharan Africa on what needs to be done to remove the pervasive pessimism.

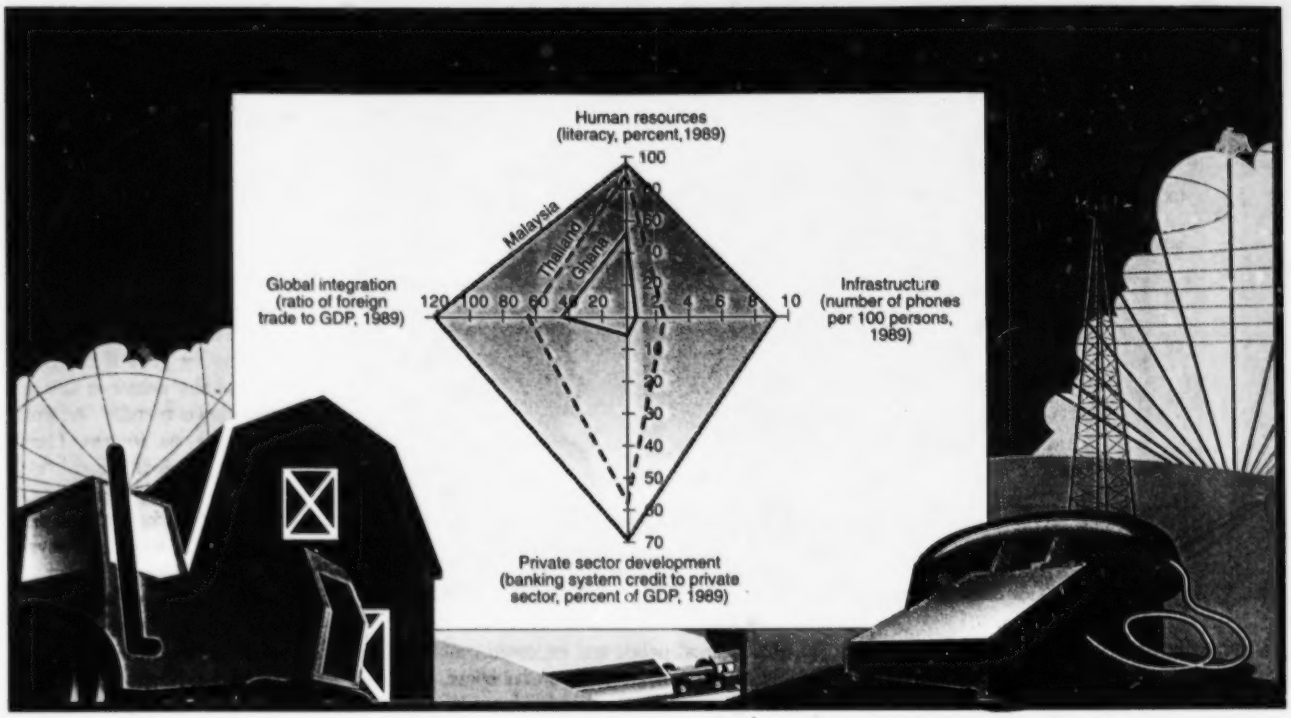
The Ghanaian economy stands at a crossroads. Its adjustment program is one of the most successful in sub-Saharan Africa. Since 1983, a decade of stabilizing policies has yielded broad budget balance, strong export growth, a reasonable external position, and substantial structural reforms, including some privatization and closures of loss-making publicly owned companies. Even so, real growth has remained at only about 5 percent a year. And although per capita income rose at about 2 percent a year to end the 1980s at $390, Ghana is still among the world's poorest countries. At this growth rate, the average poor Ghanaian would not cross the poverty line for another 50 years. This is clearly not good enough.

What would it take for Ghana to become a middle-income country by the year 2007, the 50th anniversary of Ghanaian independence? What would be needed to ensure that the average poor Ghanaian would have crossed over the poverty line by then? In recent years, Ghana's policymakers have begun to refocus their attention from short-term issues to longer-term growth and development issues.

The recent dynamic growth in East Asia shows that such efforts can succeed. Fast-growing East Asian economies, such as Indonesia, Malaysia, and Thailand, which were poorer than Ghana in the 1960s (Chart 1), have doubled their per capita income and achieved a dramatic reduction in poverty in roughly ten years. East Asia shows what can be achieved with pragmatic and sensible government policies and a disciplined, hard-working population that responds to the right incentives. The methods the Asian economies used in the 1960s and 1970s to lay the foundation for faster growth in the 1980s could serve as important lessons for Ghana.

Much of Ghana's growth in the medium term (up to the year 2000) would need to come from agriculture, mining, and services. Industrial growth will follow with a time lag, but the basis for such growth—education, infrastructure, telecommunications, market





development, and technological innovation—must be laid now. Ghana starts from a strong position (Chart 2). Its growth rates since 1983 are close to those enjoyed by Thailand and Malaysia a generation ago, except in agriculture, where performance has been weak. Even if growth does not reach the level anticipated, the effort itself may provide a common national purpose and a unifying force during this period of political transition to a more democratic form of government. Aiming high and trying harder appears to be a low-risk and high-gain option, provided that expenditures are kept within limits.

In this connection, it should be noted at the outset that Ghana made considerable progress in stabilizing the economy between 1983–91, laying the basis for the recovery in economic activity. However, serious slippages developed in the 1992 election year, largely as a result of civil service wage increases. In response, the Government has adopted tough corrective measures designed to bring economic performance back on track. It would be essential to maintain the stability as a prerequisite for accelerated growth.

East Asia's success

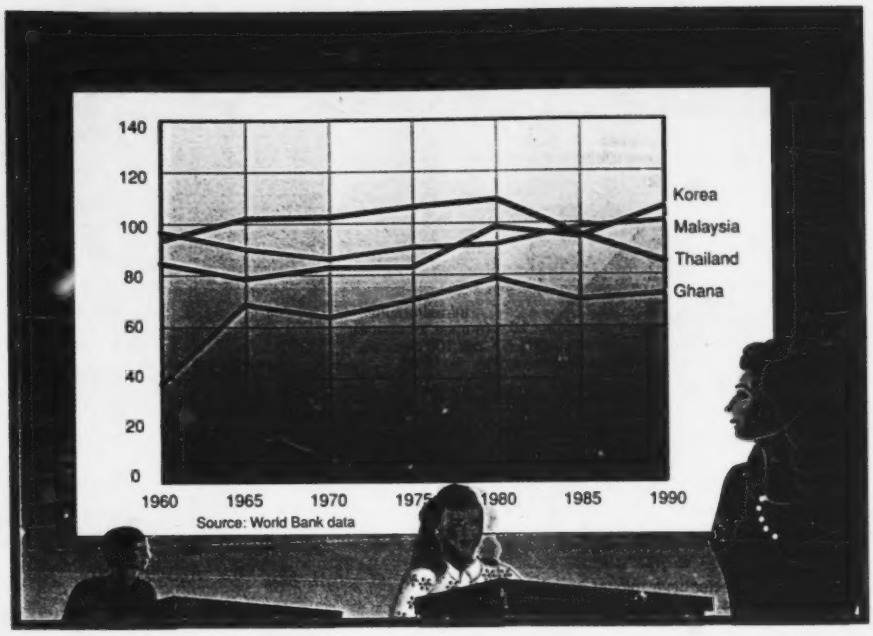
What specific domestic actions accounted for East Asia's successes, and what is their relevance for Ghana? Three areas stand out—education, literacy, and health; openness in international markets; and public sector discipline and private investment.

Emphasis on human development. Most successful economies achieve near universal literacy as a precondition to rapid growth. Ghana's tertiary and secondary education systems compare favorably with those of fast-growing economies that are beginning the push toward rapid growth. The same is not true, however, in primary education (Chart 3) and literacy. Ghana's literacy rate is about 55 percent, its functional literacy rate about 35 to 40 percent—much lower than in many other African countries. Ghana needs to focus the bulk of its education spending on literacy programs and primary education and rely more heavily on private resources to finance its growing secondary and tertiary education programs.

Similar issues must be addressed in the area of health. Currently, the country's resources tend to be skewed toward urban areas. More emphasis needs to be placed on providing equitable primary health and preventative care, rather than on hospitals and curative care. Other key issues include developing a national drug policy to strengthen drug regulation and enforcement and crafting consistent national strategies to address malnutrition problems.

Openness. Ghana needs a more aggressive export drive focusing especially on agriculture, agro-processed products, and light manufacturing. Ghana introduced sweeping trade liberalization in the early stages of its adjustment program. This is appropriate, since the import liberalization led to greater reduction in the anti-export bias. However, some would argue that import liberalization proceeded too fast, leading to severe adjustment problems for industry, especially for protected, noncompetitive companies. More time should have been given to allow firms to shift from noncompetitive activities to competitive, export-oriented ones. Many firms went bankrupt, and those that remain cannot access new credit to go into new lines of activity, as they are tarred by their past bad debts. Some are clamoring for restoration of protection (e.g., textiles). These cries should and are being resisted by the Government. Still, there remains the question of the companies' financial distress and how to help them invest in potentially competitive activities with financial and other support.

Ghana's trade ratios (exports to GDP and imports to GDP), which have risen in recent years, could increase even more. At 15 percent of GDP, the country's export ratio is low because noncocoa, nonminerals exports are small. What can Ghana do to push export growth? First, it should continue its appropriate exchange rate policies to provide nondiscriminating export incentives, as well as offer government support in finance and infrastructure to exporting firms. Second, because labor costs are an important factor in determining the competitiveness of Ghana's exports, it can work to link wage bargaining more closely to labor productivity. Third, it can oversee the



changes in rules and regulations needed to facilitate the entry of foreign companies and improve tariff levels, export finance, and quality control. Finally, it can actively promote a better export infrastructure in areas such as telecommunications, warehousing, and refrigeration.

Foreign companies and Ghanaians abroad can play a key role in Ghana's drive toward a more open export-oriented economy. Foreign direct investment is important for two other reasons. First, official development assistance to Ghana may come down from its current level of about 8 percent of GDP today, which is high by international standards. Commercial borrowing on a large scale is not a viable or wise option, so that foreign direct investment can play an important role in filling the gap. Second, foreign partners can also play a key role in technology transfer and in Ghana's export drive, as they did in East Asia and Latin America. This can happen only if greater emphasis is placed on forming partnerships with foreign businesses.

Working with business. A striking difference between Ghana and the East Asian success stories lies in the interaction between the public and private sectors. Ideally, governments should have a clearly defined role and a proactive complementary relationship with the private sector. Moreover, East Asian governments have been fiscally prudent. In East Asia, government spending was not small, but it was geared to promoting and not competing with the private sector. Moreover, because of vigorous revenue mobilization, the public sector has been a net saver since the 1960s, rarely crowding out the private sector.

In Ghana, fiscal policy has improved considerably, but there is scope to do far better. The public sector deficit could be reduced by cutting transfers to state enterprises, reducing unfunded liabilities, such as end-of-service benefits; reducing uneconomic subsidies on water, electricity, and transport; and improving revenue mobilization through a value-added tax.

Lower fiscal deficits need not imply less government involvement, however. In fact, a strategy for accelerating growth implies a larger role for government in some areas. There is a case for greater government involvement in, among other things, primary education and health, transport infrastructure, and research and extension, as well as operations and maintenance of its existing facilities. At the same time, the government could leverage its outlays in energy, telecommunications, mining, and manufacturing by encouraging greater private sector participation through leasing, joint ventures, and management contracts. The government can contribute more to the economy with the same resources by improving its financial management, speeding up implementation of development projects, reorienting its expenditure pattern, and raising the quality of its services.

Public sector discipline and private investment promotion go beyond expenditure allocation and fiscal issues, however. Lack of clarity in the limits to public sector activity in Ghana remains a major impediment to private sector confidence and investment response. This confusion is due to a cobweb of old controls and regulations, a lack of transparency in the enforcement of laws and regulations, and continued government ownership of production activities, despite the government's stated intention of leaving these areas to the private sector. Greater government transparency, due process, and speedy divestiture are necessary to rebuild confidence. Efforts are underway to improve the climate for investment through the formulation of the Private Sector Advisory Group (PSAG). A revised investment code is currently under discussion to improve the business climate and clarify business procedures.

The degree and nature of government intervention in promoting growth has been the subject of considerable debate in Ghana. Across-the-board, market-friendly reforms were the key to East Asia's success. These included macroeconomic stability, fiscal prudence, competitiveness through appropriate exchange rate and labor market policies, and appropriate expenditures in social and physical infrastructure. Much of the thrust of Ghana's reform program has been along these lines and should continue. Some would argue that governments should go further and target specific sectors and, as Korea did, certain businesses (especially export) for special assistance, including privileged access to credit and foreign exchange, as well as tax incentives.

This path is risky because of the potential for "picking losers rather than winners." But if Ghana does follow this second path, a few simple rules would help. First, only export industries should receive assistance. Second, only industries that already exist in the private sector should be targeted—fledgling companies trying to break into the export market—rather than projects with no apparent private sector interest. Third, subsectors in general but not particular firms should benefit in order to avoid the charge of "crony capitalism." An informal body such as the PSAG, which has provided sensible options on deregulation, could continue as a useful forum for discussion on the issues of developing a business-government partnership to foster growth.

Helping the poor

Even if growth were to occur, there is concern that it may not benefit the poor because of rising inequity—as is alleged for some countries in Latin America. If the accelerated growth envisioned here is distributed at least proportionately to the poor, a sustained and significant reduction in poverty can be achieved by 2007. What is needed to ensure such a development?

International experience suggests that well-functioning factor markets, particularly labor markets, are crucial in allowing income increases to spread throughout the economy.

But factor market mobility is not automatically pro-poor. Care must be taken to understand the unique characteristics of Ghanaian society, which can either encourage or impede the poor from benefiting. For example, while both rural and urban informal labor markets work well and respond to economic stimuli, the urban formal sector is characterized by rigidities and distortions that need to be addressed. At the same time, informal (especially urban) labor markets are often inefficient, with underemployment—and hence low income—the rule rather than the exception.

Diminishing the distortions and rigidities in factor and product markets is the most efficient way to increase the poor's productive assets and raise the return on these assets through changes in relative prices. The key public policy challenge is, therefore, to assist poor and vulnerable groups without distorting economic mechanisms, since any seemingly "pro-poor" distortions could hurt economic growth and, ultimately, the poor themselves.

Broad-based public expenditure in basic education, health, family planning, and other social and economic infrastructure has also been important in translating high growth into effective poverty reduction. It is especially important to raise the school enrollment of girls. Ghana's current public spending is considerably biased toward urban areas and against primary education and health care. Even if spending were distributed more equitably geographically, care must be taken to ensure that powerful local groups do not gain preferential access to resources and services.

The East Asian countries—Indonesia, Malaysia, and Thailand—demonstrate the benefits of an appropriate balance between policies that spur growth and policies that enable the poor to participate in growth. All three achieved and sustained annual GDP growth rates of more than 6 percent. This growth—relatively labor intensive, with agriculture to the fore—generated demand for the factors of production owned by the poor. These countries also provided for adequate social spending. As a result, they have achieved universal primary education, and their infant mortality rates are lower than those of many countries with similar incomes. The improvement in skills and quality of the labor force enabled the poor to seize the opportunities provided by economic growth.

In Malaysia, the strong economic growth in the 1970s and 1980s was accompanied by significant achievements in poverty reduction. The development of a labor-intensive manufacturing sector, an open trade and price regime, and a flexible labor market enabled the poor to expand into all branches of economic activity. Increased public spending on social services, especially public health and education, promoted equity and endowed the poor with the human capital needed to benefit from the new employment opportunities and participate in the economic growth.

Better management

Ghana has benefited from strong and able economic management in its difficult period of adjustment since 1983. Continuity and pragmatism have contributed immeasurably to this success. Strong centralized management was a hallmark of the successful East Asian economies. There, a small group of economic managers, backed by "think tanks" for long-term policy formulation, had a relatively free hand. Ghana has able policymakers but lacks a body like Taiwan's Council for Economic Planning and Development or Korea's Economic Planning Board. Ghana could also benefit from independent policy and research institutes similar to the Thailand Development Research Institute and the Korea Development Institute, which provide essential inputs into public debates on policy issues. An organization along these lines called the Centre for Economic Policy Analysis has been established recently in Ghana.

While a case can be made for greater centralization in Ghana's strategic planning and macroeconomic policy, a need clearly exists for greater devolution of responsibilities in other areas. District assemblies, city councils, and community organizations have better access to information about local preferences and are more responsive to local constituencies than the central government. With the exception of a few major cities, however, devolution will have to be gradual because of the weaker capacity at the local level to manage and execute projects.

Ghana is currently facing difficulties coping with the backlog of infrastructure rehabilitation that has resulted from years of neglect. For the near future, the ability to produce and transport agricultural products and minerals will remain critical. Placing a higher priority on public investments in underdeveloped areas with high growth potential, such as the western region, can enhance growth. Local authorities can be given a greater role in project design, selection, and maintenance. Major changes in procedures for contracting, procurement, and planning are needed, and the role of the public sector in infrastructure-related activities also needs re-examination. Greater reliance on small private contractors would be one way to overcome the maintenance backlog.

As far as basic infrastructure is concerned, the issue is not ownership, but management and execution. The government can own the ports—sea and air—the railway stock, and the road network but should consider transferring operations and management to the private sector. Power and telecommunications are industries where private participation is being encouraged the world over, and Ghana should draw lessons from this.

Finally, Ghana must find a Ghanaian way to increase growth with equity, as did Korea, Taiwan, and now increasingly, Malaysia and Thailand. This does not mean that Ghana should try to look for a new set of economic policies or ignore the important messages from international experience. There is by now ample evidence on the necessary set of economic measures needed to establish the basis for faster growth. But in the timing and sequencing of policies and in the management of the process of change, Ghana would obviously need to bring about a judicious blend of new methods with indigenous management practices. This process of marrying the new to the old is important because economic transformation will involve a comingling of the traditional society (mostly rural) with the modern (generally urban) for at least another two to three decades. ■

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This piece is based on the World Bank report "Ghana 2000 and Beyond—Setting the Stage for Accelerated Growth and Poverty Reduction," Washington, DC, February 1993.

Public Spending and Adjustment

SANJAY PRADHAN AND VINAYA SWAROOP

A RECENT World Bank review concludes that countries receiving adjustment loans have maintained aggregate social spending and reduced defense outlays while cutting deficits. However, misallocation of public expenditures remains a problem: public sector wages and spending at the tertiary level tend to crowd out basic social services and nonwage operations and maintenance.

In the late 1970s and early 1980s, rapid growth in public spending that outpaced domestic revenues led many developing countries into fiscal crisis. Since then, a number of these countries have attempted to bring down fiscal deficits, often by reducing public spending, as part of their economic stabilization and structural adjustment programs. While such reductions are clearly necessary, across-the-board reductions and other improper retrenchments in public spending can result in unacceptable economic and social costs.

The way in which public expenditures (the goods and services governments provide to their people) are allocated has significant effects on both economic growth and the alleviation of poverty. A sound physical infrastructure, including rail and road networks, communication systems, and sewer and water facilities, promotes private sector productivity and facilitates economic growth. Publicly provided social services, especially primary and secondary education and primary health care, improve the welfare and productivity of the poor. So important are these types of public outlays in developing countries that they must be protected from across-the-board spending cuts aimed at deficit reduction.

The stabilization and adjustment programs supported by the IMF and the World Bank in many developing countries have been criticized as potentially dangerous to social sector programs. Some critics, including UNICEF, maintain that the fiscal austerity these policy-based lending programs impose has forced governments to curtail social sector spending, particularly for health and education. In addition, some donors have expressed concern that military outlays have remained exempt from spending cuts and that loans from multilateral organizations intended to support adjustment have instead been used to finance further military expenditures.

Are these claims and concerns justified? Where have the spending cuts during adjustment fallen, and what have they meant for economic growth and the alleviation of poverty? Recognizing the need to address these issues, the World Bank recently carried out a review of the changes that have taken place in the levels and composition of public spending in two distinct country groups. Annual data on various public expenditure categories from the IMF's *Government Finance Statistics* were examined for 16 countries that have received adjustment lending—AL countries—and 13 that have not—NAL countries (Box 1). Two sets of unweighted average expenditure variables corresponding to the periods 1981–85 and 1986–90 were constructed to approximate the pre- and postadjustment periods across coun-

Chart 1

Economic composition of government expenditures

(percent share of GDP)

Expenditure	Adjustment lending countries		Non-adjustment lending countries	
	1981–85	1986–90	1981–85	1986–90
Capital	3.9 (16.3)	3.4 (14.8)	5.1 (19.9)	4.2 (17.8)
Current	19.7 (84.3)	19.6 (85.5)	20.0 (79.2)	19.4 (82.6)
Interest	3.2 (13.5)	4.5 (18.6)	2.0 (8.0)	2.5 (10.6)
Wages	5.8 [28.4]	5.5 [30.8]	7.2 [35.1]	6.7 [36.9]
Other goods and services	4.3 [22.5]	4.0 [22.0]	5.9 [20.9]	5.8 [22.8]

Source: IMF *Government Finance Statistics* database.
Note: Numbers in parentheses are percentage shares of total expenditure. Numbers in brackets are percentage shares of total expenditures net of interest.

tries. This article summarizes the key findings from the World Bank's review and their implications for policymakers in developing countries.

Patterns of public spending

Overall, the results of the review indicate that while levels of public spending have decreased, misallocation of public expenditures remains a problem. Among the positive developments have been reductions in fiscal deficits, the squeezing out of many inefficient projects, and a decline in military expenditures. At the same time, aggregate social sector spending has been protected from cuts.

There have also been negative developments, however. Outlays for important but politically less visible operations and maintenance (O&M)—such as providing drugs and supplies for health clinics and repairing roads—have been reduced. Allocations within the social sectors continue to be skewed away from high-return, equitable primary services such as primary education and preventive health care toward tertiary levels, particularly universities and hospitals. And little progress has been made in reducing excessive public sector employment.

On average, developing countries were able to reduce their budget deficits substantially during the 1980s. The AL countries—most notably Bolivia, Ghana, and Malawi—cut their deficits as percentages of GDP by half between 1986 and 1990, primarily by increasing revenues through carefully designed tax reforms. Aggregate expenditures were reduced only marginally, but expenditures net of interest dropped significantly to adjust for the rapid growth in interest payments during the 1980s.

Changes in public spending were analyzed by examining two specific aspects: first, the economic composition of the expenditures —that is, the type of outlay, such as capital, wages and salaries, and interest; and second, the functional composition, which defines the actual purpose of the expenditures—education, health care, defense, or transport, for example (Charts 1 and 2).

	Sub-Saharan Africa	Asia and the Pacific	Europe, Middle East, and North Africa	Latin America and the Caribbean
AL (16):	Ghana Kenya Malawi Mauritius	Korea Pakistan Philippines Thailand	Morocco Turkey	Bolivia Brazil Chile Costa Rica Mexico Uruguay
NAL (13):	Botswana Burkina Faso Liberia	India Malaysia Myanmar Papua New Guinea	Egypt Oman	Dominican Republic El Salvador Guatemala Paraguay

Source: IMF *Government Finance Statistics Yearbook* and World Bank documents.
The data from the 29 countries used in this study are confined to central government expenditures; the operations of state and local governments, as well as public sector enterprises, are excluded. The group averages may be biased toward improved performance, since only countries with at least a minimum quantity of public finance data are in the sample.

Economic composition

During periods of fiscal austerity, governments always find it easier to cut capital spending than to reduce current expenditures. For political decisionmakers, deferring or canceling a capital-intensive project such as a power plant or road-widening scheme is a much "softer" option than laying off government workers.

Such has been the recent experience of developing countries. One of the most important trends during the adjustment period of the 1980s was a sharp cut in capital spending as a percentage of both GDP and total expenditures, but relatively little change in current expenditures as a percentage of GDP.

Capital spending. During the early phases of adjustment, public investments were scaled down and potentially wasteful projects eliminated in a number of AL countries (Bolivia, Brazil, Chile, Colombia, Costa Rica, Côte d'Ivoire, Indonesia, Kenya, Madagascar, Morocco, Pakistan, and the Philippines). In many of these countries, reductions in investment were associated with the World Bank's public investment reviews, which are aimed in part at identifying large projects that offer low or negative economic returns and at shifting public investment from manufacturing to infrastructure.

Côte d'Ivoire's second structural adjustment loan program, for instance, canceled investments in a four-lane divided highway and a new, expensive university campus. And in Indonesia, many of the large, capital-intensive industrial projects initiated during the

Chart 2
Functional composition of government expenditures
(percent share of GDP)

Sector	Adjustment lending countries 1981–85	Adjustment lending countries 1986–90	Non-adjustment lending countries 1981–85	Non-adjustment lending countries 1986–90
Economic infrastructure	1.8 [9.6]	1.6 [8.9]	1.8 [7.9]	1.5 [6.4]
Education and Health	4.6 [23.5]	4.5 [25.1]	4.7 [20.4]	4.8 [22.8]
Defense	2.7 [13.9]	2.3 [13.2]	4.5 [18.0]	4.0 [18.5]
Industry and Mining	.39 [2.2]	.23 [1.3]	.39 [1.8]	.41 [2.0]

Source: IMF *Government Finance Statistics* database.
Note: Numbers in brackets are percentage shares of total expenditures net of interest.

second oil boom were dropped in the 1980s.

To the extent that public investment spending, which had climbed dramatically during the 1970s, was reduced by canceling low-return projects, the initial decline in these expenditures was not wholly undesirable. But a continuing drop in public investment in some countries, such as the Philippines, is now creating infrastructure bottlenecks. There are clear indications that cuts made primarily for the sake of short-term adjustment are taking a toll on economic growth, and some countries—Morocco is one example—are now taking steps to reverse the shortfall in public investments.

Interest payments. In large measure, these reductions in capital investment occurred as countries adjusted to the increasing burden of the accumulated (and often imprudently incurred) debt of the 1980s. Although interest burdens have increased for virtually all developing countries, their growth has been particularly rapid in Latin America and the Caribbean region. The average share of interest payments in GDP for six AL countries there—Bolivia, Brazil, Chile, Costa Rica, Mexico, and Uruguay—rose 60 percent, from 3.6 to 5.8 percent, from the first to the second half of the 1980s.

Public sector employment. While the rapid growth in public sector employment and wages that was common in the 1960s and 1970s has been checked, little has occurred to reduce the number of employeesor the total spending on wages. On average, the share of wages in the budgets of both AL and NAL countries has remained constant. Many countries, including Kenya, Nigeria, and Tanzania, have responded to fiscal austerity by maintaining public sector employment. But in doing so they have reduced real wages, causing productivity levels to drop sharply. The Tanzanian civil service, for example, remains heavily overstaffed and underpaid. In only a few countries—notably Argentina, The Gambia, Ghana, and Guinea—has there been some success in reducing excessive public sector employment.

Box 2

Progress in restructuring spending in Ghana

Supported by a series of adjustment loans, Ghana has progressed in restructuring its expenditures. At the start of its adjustment program in 1983, the country faced a number of severe public spending problems.

Nonwage O&M had been neglected, and public investment had declined to less than 1 percent of GDP. The result was a near-collapse of the country's economic infrastructure, severe erosion of social services, and weak social indicators as spending for health and education dropped.

In the context of the adjustment program, Ghana made substantial progress in addressing several problems. Capital expenditures to meet infrastructural needs had risen to about 8 percent of GDP by the end of the decade. Expenditures were restructured to increase the share of nonwage O&M in health, education, and agriculture. The share of social services (including education and health) in total expenditures increased dramatically, from 34.5 percent in 1984 to about 50 percent in 1989. Real per capita education spending increased by 150 percent between 1984 and 1989, while real per capita health expenditures tripled. The share of primary education also grew, and there was greater cost recovery and a reduction of subsidies for higher education. Basic education enrollments and a range of health indicators also climbed.

While much remains to be done, Ghana has begun to shift its spending priorities, supported by the specific measures and discussion that form part of its adjustment loan program.

Operations and maintenance. Rising interest payments and a lack of success in reducing the total cost of wages have taken a toll on spending in this category. The budgetary share of public spending on "other goods and services" (a proxy for nonwage O&M expenditures) declined in three fourths of the sampled AL countries, although these expenditures often have high rates of return; the expected return to nonwage O&M in the irrigation sector in Indonesia in the mid-1980s, for example, was estimated at 100 percent.

In many countries, important infrastructure projects and services with potentially high returns have deteriorated as a result of these reductions. A recent study concluded that neglected maintenance has left half of sub-Saharan Africa's paved roads in only fair or poor condition. And if those currently in good condition are allowed to deteriorate, vehicle operating and future road restoration costs will increase some 270 percent.

In many of Africa's sub-Saharan countries, including Côte d'Ivoire and Kenya, the delivery of services has deteriorated dramatically as spending on materials and supplies is curtailed to cover personnel costs. Schools are without teaching materials, health clinics lack drugs and supplies, and rehabilitated roads are once again becoming impassable. In Costa Rica, Madagascar, Pakistan, and the Philippines, nonwage O&M has borne the brunt of the expenditure cuts. Only a few countries Ghana, for example—have made concerted efforts to increase nonwage O&M for critical services (Box 2).

Functional composition

The review suggests that adjustment programs supported by the IMF and the World Bank do not impose unacceptable social costs on, or increase military spending in, developing countries, as critics have suggested.

Social sector spending. The available data reveal that aggregate spending on health and education followed similar trends in AL and NAL countries. In fact, the share of health and education expenditures in total public spending net of interest increased in AL countries, and real per capita social spending rose slightly more in AL than in NAL countries.

An examination of the individual AL countries suggests, however, that for many the allocation of expenditures within the social sector remains a problem. Although the budgetary shares of social expenditures may not have declined, intrasectoral imbalances remain and in some cases have worsened. In Bolivia, Brazil, Costa Rica, Côte d'Ivoire, Kenya, and Pakistan, for instance, resources appear to be concentrated at universities and hospitals; at the same time—and despite poor social indicators—allocations have been declining for basic social services and supplies such as drugs and textbooks, while overstaffing continues.

In Brazil, students pay no tuition at the public university level, although the estimated cost per student is $6,000 annually—roughly 25 times more than it is at the primary level (Box 3). In Kenya, budgetary costs per student at the university level are over 70 times higher than those for students at the primary level, and nonwage expenditures for primary education have dropped so sharply that they now amount to less than half the price of one textbook per student per year. Despite its regime of fiscal austerity, Chile is one of the few countries that has been able to protect targeted and poverty-oriented expenditures; it has, for instance, made real increases in allocations

to primary education and high-quality nutrition programs for malnourished children and pregnant and lactating mothers.

To alleviate the social costs of adjustment, donor agencies and developing countries have often supported special "social funds" and "action programs" that finance short-term interventions and targeted projects. But these programs are not a substitute for the fundamental restructuring of social sector spending that is necessary to increase productivity and alleviate poverty.

Military spending. Is development assistance being used to finance military expenditures, either directly or indirectly? While some developing countries continue to allocate up to one quarter of their GDP and as much as one half of total central government expenditures to the military, most developing countries substantially reduced their military expenditures in the late 1980s. Available data for AL countries indicate that, on average, military expenditures as a share both of the budget and of GDP have declined.

These aggregate results, however, mask the relatively high levels of military spending that persist even in some AL countries. For example, there is evidence that in Pakistan and Uganda defense expenditures have been diverting necessary funds from basic social services, despite high rates of infant mortality, illiteracy, and malnutrition. It is important to ensure that basic services are adequately funded and not crowded out by high or rising military expenditures.

Policy for the future

A careful scrutiny and restructuring of public spending priorities in the context of adjustment can help alleviate poverty and promote an enabling environment and infrastructure for growth. There is no single determinant of how much money countries should spend on the public sector or how they should allocate the expenditures. Rather, public spending policy should be carefully tailored to individual countries, based on a detailed assessment of need. More than a decade of adjustment experience has provided several important lessons for policymakers in developing countries, as well as for the World Bank:

- The level and composition of public expenditures should be an integral part of the policy framework of an adjustment program, as they were during Ghana's adjustment operations, but not Brazil's.
- During the adjustment process, adequate funding is necessary for nonwage O&M and for investment in the economic infrastructure. The Bank needs to place greater emphasis on nonwage O&M for high-return programs, while continuing its focus on public investment and civil service reform.
- Social spending policy needs to emphasize basic health and education services. Although attention to social spending in adjustment programs has increased in recent years, the instruments that have been used—social funds and action programs—constitute short-term compensatory measures only and are not adequate substitutes for the fundamental restructuring of social spending.
- Retrenchments in surplus sectoral employment are essential to reducing total spending on wages in the public sector. Adjustment lending can help cover the upfront costs of making these reductions rationally and fairly.
- When defense spending is crowding out necessary public spending, resources should be allocated away from military expenditures toward basic services. Given the Bank's charter, adjustment loans cannot be made conditional on reducing military spending. The Bank can play a legitimate role, however, in examining the adequacy of economic and social sector spending. But the burden is on the developing countries themselves to ensure that legitimate defense needs are met cost-effectively and that allocations for key development areas are sufficient to foster growth and alleviate poverty. ■

Box 3

Spending imbalances within social sectors in Brazil

Brazil spends more per capita on social programs than many similar developing countries. Yet virtually all indicators show that the social welfare of most of Brazil's population lags well behind that of countries with similar income levels. For instance, the average child in Brazil completes fewer than five years of schooling—the second-lowest level in South America after Bolivia. In 1989, Brazil's infant mortality rate was more than twice that of Korea and three times that of Chile.

Brazil's weak performance reflects the misallocation of expenditures within the social sectors. In 1986, the poor constituted 41 percent of the population but received only about 20 percent of social expenditures. Social security and urban housing, which benefit primarily wealthier groups, account for about 50 percent of all social sector spending.

In education, students pay no tuition at public universities, and the total cost of maintaining university students is close to US$1 billion per year. At the primary and secondary levels, public expenditures continue to lag, resulting in poor educational quality, high dropout rates, and low educational levels among much of the population.

Public health spending is beset with similar problems. It favors formal sector employees, the richer regions, and, increasingly, personal curative rather than preventive services. The share of total public health spending allocated to curative services rose from 36 percent in 1965 to 85 percent in the 1980s. Brazil allocates about 70 percent of its public health spending to hospitals, much more than similar developing countries and more than industrial economies.

For more information, see "Adjustment Lending and Mobilization of Private and Public Resources for Growth," Country Economics Department, Policy and Research Series 22, The World Bank.

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Auctions: A Sampling of Techniques

ROBERT A. FELDMAN AND RAJNISH MEHRA

FOR COUNTRIES making the transition from centrally planned to market-based economies, auctions offer many advantages. There are a variety of auction techniques, and the choice of an appropriate format depends on the item or items being auctioned and on individual country circumstances.

In many parts of the world, countries are trying to establish and improve market-oriented institutions. This effort is particularly evident in the transforming economies of Eastern Europe and the newly emerging states of the former Soviet Union. The use of appropriate auction techniques can determine market-clearing prices where markets may not otherwise exist. It can also help acclimate the business sector to operating in a world of market-determined and changing prices and efficiently allocate the items being auctioned.

Numerous auction formats are used throughout the world. Is one better than the other? Unfortunately, there is no unambiguous answer to this question. The most appropriate technique will depend on the asset auctioned and on individual country circumstances. For countries seeking to adopt auctions, therefore, the basic auction formats are worth exploring. This article explains these formats, drawing on the existing—and mostly theoretical—literature. It also assesses alternative auction techniques for pricing and allocating various financial instruments, using government securities, refinance credit, and foreign exchange as examples.

In practice, techniques used to auction similar items vary considerably across countries, both industrial and developing. Several countries auctioning government securities have awarded them at whatever price was bid (e.g., France, Germany, Japan, and the United Kingdom), while others have charged a single market-clearing price (e.g., Denmark and Switzerland). Italy and Mexico have recently auctioned government securities using both uniform and multiple price techniques. The US Treasury is currently experimenting with uniform-price auctions for some government securities and conducting discriminatory auctions.

Types of auctions

Actions may be used for a single item or unit, such as artwork and construction contracts, or for multiple units of a homogeneous item, such as gold and Treasury securities. While this article deals primarily with auctions of multiple, homogeneous assets, the theoretical literature frequently assumes that a single unit is being auctioned. Accordingly, the definitions used here will apply to both single and multiple unit auctions.

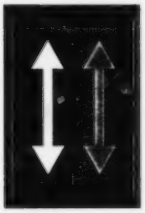
English or ascending-price auction. This type of "open" auction is the most familiar. Starting with a low first bid or a specified reservation price—a price below which the item will not be sold—the auctioneer solicits increasingly higher bids. With a single item, the process continues until the item is sold to the highest bidder. In an auction involving multiple units, the process continues until a price is reached at which total demand matches the fixed amount supplied.

Dutch or descending-price auction. Another kind of open auction owes its name to the technique used in the Netherlands to auction produce and fresh flowers. The bidding starts at a high price that is progressively lowered until a buyer claims the item by shouting "mine!"—or, in more modern times, by pressing a button that stops an automatic clock at an acceptable price. When multiple units are being auctioned, there are normally more takers as the price declines; the process continues until a price is reached whereby the fixed amount supplied is matched by total demand. Dutch auctions have been used for refinance credit in Romania and for foreign exchange in Bolivia, Ghana, Jamaica, and Zambia.

First or discriminatory-price auction. This is a sealed-bid rather than an open auction. The term "first price" commonly applies when a single item is being auctioned. In such cases, the highest bidder is awarded the item at a price equal to the amount bid. When multiple units are auctioned at the same time, the procedure is called a discriminatory auction. The sealed bids are sorted from high to low, and items are awarded at the highest bid prices until the supply is exhausted. Thus, the auction discriminates between bidders in the sense that they can pay different prices according to the amount they bid. Confusion sometimes arises because, in the financial community, this auction format is frequently referred to as an English auction; in the United Kingdom, it is called an American auction; it is also referred to as a multiple-price (or in some

cases multiple-yield) auction. Discriminatory-price auctions have also been used for refinance credit and foreign exchange.

Second or uniform-price auction. This type of auction is also a sealed-bid auction. When a single item is auctioned, the highest bidder is awarded the item at a price equal to the highest unsuccessful bid (thus the name, second price). The multiple unit extension of the second-price, sealed-bid auction is referred to as a uniform-price or competitive auction, because all winning bidders receive the auctioned items at the same price. Also known as a marginal-price auction and in the financial community as a Dutch auction (giving rise to some confusion in terminology), uniform-price auctions were used in the former Czechoslovakia for refinance credit and in Guinea, Nigeria, and Uganda for foreign exchange.



Double auction. Using this format, both sellers and buyers submit bids, which are then ranked from highest to lowest to generate demand and supply profiles. From these profiles, as illustrated in the example below, the maximum quantity exchanged can be determined by matching sell offers (starting with the lowest price and moving up) with demand bids (starting with the highest price and moving down), although the "equilibrium" price may be indeterminate using this methodology. As an example, suppose four sellers of foreign exchange offer to sell one unit at prices of 100, 200, 300, and 400 units of domestic currency, and four demanders of foreign exchange offer to buy one unit at prices of 400, 300, 250, and 50 units of domestic currency. Supply and demand would match at three units of foreign exchange, but the price would remain indeterminate, falling somewhere between 200 and 250. Romania has used this type of auction.

Auctions also differ according to how each bidder values the item or items on the auction block. Economists customarily distinguish between the "private-value" case and "common-value" case. The first involves objects acquired for personal consumption; there is no primary motive to resell. The bidder, therefore, is willing to pay up to a certain maximum, independent of the valuations of rival bidders. The second refers to objects acquired primarily for profitable resale in secondary markets. In this case, individual bids are predicated not only on personal valuation but also on the valuation of prospective buyers in the common-value case. Under common value, each bidder places the same value on the object—that is, each one tries to estimate the object's ultimate worth on the basis of the same standard. This common value may be an unobservable variable at the time of the auction, as is the case when a government security is purchased to be resold in the secondary market.

Auction theory

In any attempt to evaluate different types of auctions, the nuances and details surrounding the choice of any particular auction format are exceedingly important.

The bidder's perspective. Although bidders may have quite different characteristics, the theoretical literature often assumes that auction participants are homogeneous. Assuming that bidders are identical and will all focus on maximizing profits (in the parlance of the literature, risk-neutral and symmetric) and that only one item is being auctioned, the Dutch auction is strategically equivalent to the first-price, sealed-bid auction. No relevant information is revealed until the conclusion of the auction, when it is too late for any bidder to act on or change a bid. The English and second-price auctions are equivalent under the private-values assumption, but not under the more realistic common-value assumption. (In an English auction, new information is obtained from the bidding process; this is not the case with a second-price auction.)

"Recognizing the winner's curse, bidders in first-price auctions will tend to bid less aggressively and shade their bids below their true estimate."

A particularly important consideration from the bidders' perspective is the "winner's curse," or the trade-off between the probability of winning the auctioned item and the expected profit from winning, when all other participants appear to be estimating a lower market value. In effect, winning bidders are faced with the realization that their assessment of value exceeded that of all the other bidders. And being aware of this possibility, bidders in, for example, a first-price auction are likely to "shade" their bids in an effort to move closer to the market consensus. In such situations, bidders may also devote their resources to assessing rival bids and information in an effort to bid closer to this consensus.

The seller's perspective. The theoretical literature demonstrates that under the assumption of private value, all four basic auction types can be shown to yield the same expected price and revenue to the seller when bidders are risk neutral and symmetric. This "revenue equivalence theorem" implies that the particular auction format chosen by the seller is not crucial because each format yields, on average, the same payoff.

But the revenue equivalence theorem does not necessarily hold under the common value assumption. It can be shown that the expected revenue from selling a single object (but not necessarily multiple objects) in the four auction formats can be ranked from highest to lowest, as follows: the English ascending-price auction; the second-price, sealed-bid auction; the Dutch auction and the first-price, sealed-bid auctions (tied). It is conjectured that this ranking tends to carry over in a multiple-object environment.

The rankings clearly illustrate the advantage of increased information. The English auction reveals information about rival bidder valuations and permits a dynamic updating of the personal valuation by individual bidders, leading to more aggressive bidding. In comparison, recognizing the winner's curse, bidders in first-price auctions will tend to bid less aggressively and shade their bids below their true estimate. Similar reasoning applies to the strategically equivalent Dutch auction. In contrast, in the second-price (uniform) sealed-bid format, the winner pays the bid of the next highest bidder. Bidders in these auctions tend to raise their bids above what might be offered in a first-price auction bid, secure in the knowledge that they will not be disadvantaged if rival bidders' valuations are much lower.

Efficiency. The theoretical literature on auctions emphasizes economic efficiency less than other aspects of the various auction formats, such as their revenue-generating potential. The available evidence—both theoretical and empirical—indicates that auctions, in the absence of distortions, function efficiently in a range of circumstances, so that resources accrue to those that value them most highly and sellers achieve the maximum value for their assets. In addition, the auction mechanism can achieve this objective more effectively than alternative trade arrangements, such as price setting by the seller or negotiation between buyer and seller.

Collusion. The extent to which incentives to collude vary under different auction formats

is of practical concern in deciding on the type of auction mechanism to implement. All auctions are susceptible to collusive behavior in one way or another, but the incentive for collusion varies under different auction formats.

A basic hypothesis, first formulated by economist Walter Mead in 1967, is that ascending-bid formats are more susceptible to collusion than sealed-bid auctions. This belief may explain the popularity of sealed bidding, even though the ascending bid format has superior revenue-generating potential. The open format is more conducive to collusive agreements because adherence can be readily monitored and because any "ring" member attempting to exploit the pact by a side deal would effectively negate the ring and restore the auction to a competitive footing.

Sealed-bid auctions, in comparison, are vulnerable to collusion between the auctioneer and one or more bidders or between the auctioneer and the seller, because fraudulent activity by the auctioneer is easier to hide when bids are sealed and not revealed to others. This format is, however, less prone to collusive rings, as sealed bidding tempts the participants in any conspiracy to bid just above the agreed price, effectively dissolving the cartel. This result also holds for the Dutch format, even though it is an open—rather than a sealed-bid—auction. For example, when one item is auctioned, the first bidder to defect from the ring ends the auction. Theoretically, the ranking from (potentially) most to least collusive is an English auction; a uniform, second-price auction; a discriminatory, first-price auction; and a Dutch auction.

Applications

Government securities. Considerable debate has focused on the question of the appropriate auction format for selling government securities. The theoretical analysis assumes that bidders demand only one indivisible unit of the commodity being auctioned. But in the case of government security auctions, bidders frequently submit bids for multiple units. They may also be permitted to submit multiple bids, in effect demanding differing quantities and prices at the same auction. In such circumstances, theoretical models offer only limited insight.

One major argument in favor of a uniform second-price auction rests on the belief that this type of auction will probably increase revenue to the government because the winner's curse is muted, leading to more aggressive bidding. The magnitude of the increase may be small, however, and economic efficiency may be a more appropriate goal than revenue maximization. Another often-cited advantage is that, because the winner's curse is muted, participation and competition will increase. A third advantage is that it can promote economic efficiency by reducing the amount of resources that would otherwise be devoted to assessing rival bids and information, an activity that may be considered excessive when it serves only to redistribute wealth among bidders and therefore constitutes a "dead-weight" loss from a societal perspective. A final consideration is that a uniform, second-price auction may be easier to implement. A major disadvantage of uniform price auctions, however, is that they are more prone to collusion than discriminatory auctions.

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Any recommendation favoring a particular type of auction must be country-specific. If a fairly active competitive market exists, a uniform price auction may be appropriate, since the threat of collusion is minimal, and society could gain from devoting fewer resources to assessing rivals' actions. Revenues to the government may also increase, although estimates indicate that such increases may be small (as in the case of the United States, for example).

If the market in a particular country is thin and subject to collusion, a discriminatory auction would seem more appropriate. In an immature market, the discriminatory format may be useful initially because it encourages information gathering that may in turn help support market development. But in the absence of concerns about collusion, a later shift to a uniform format would be desirable. To increase competition and safeguard against monopoly positions, measures—such as lowering barriers to entry—should be taken.

In some situations, English auctions might also be considered (recall the earlier discussion under "the seller's perspective"), particularly in cases where it is possible to run a centralized open-outcry auction, for instance, in a small country where all auction participants could gather in one location in the capital city.

Refinance credit. In general terms, refinance credit represents direct lending by a central bank, usually to the financial sector but sometimes directly to ultimate users. Lending to the financial sector can be for the specific purpose of implementing monetary policy by, for example, providing liquidity to commercial banks to meet specified monetary targets. It can also represent lending by the central bank to provide funds to the financial sector for on-lending directed to targeted activities.

Auction techniques are one way to allocate refinance credit. They have the advantage of tying the refinance rate to market conditions and improving efficiency. A potential added benefit is that auctions may improve transparency while lessening discretion in the allocation of credit. Auctioning refinance credit may, however, subject the seller to risks because payment for the auctioned item or items may not be made in advance, as it is with government securities. Clearly, the institutional setup of any auction must ensure the quality (such as the credit risk) of the bidders to avoid problems such as adverse selection, with the riskiest bidders always bidding the highest prices. A difficult situation could arise, for example, if those demanding refinance credit have strong incentives to seek credit at higher prices because they themselves hold nonperforming assets and are ready to go under.

Foreign exchange. Countries adopting market-related arrangements for their exchange rate have been confronted with two basic choices: operating an interbank type of market within the private sector, which may, in addition to commercial banks, include other licensed foreign exchange dealers; or developing an auction system under which foreign exchange is surrendered to the central bank for auction to the highest bidders.

Under the auction system, countries have used different techniques that in general are based either on discriminatory pricing (including a Dutch auction) or on a uniform pricing approach. A possible difficulty with discriminatory pricing is that it may discourage potential participants from entering the market, or, because of the winner's curse, impede more aggressive bidding. (Some countries have argued that this result can be advantageous in deterring speculators or at least ensuring that

they pay the full price for their bids.) Other problems include determining the appropriate exchange rate to be used for transactions outside the auction (e.g., for government transactions and customs purposes). Uniform pricing would resolve some of these difficulties and more closely match the functioning of private foreign exchange markets. But the interbank approach has the advantage of involving less government control over the availability of foreign exchange in the private sector, as opposed to auctions, which rely on the government to specify the quantity of exchange available—perhaps after the government's own needs have been met.

The double auction, with both sellers and buyers submitting bids, is less restrictive because the government has less discretion in determining the amount of foreign exchange to be auctioned. In addition, the double auction involves the private sector on both the supply and demand sides, a technique that is, in a sense, implicit in the interbank market when brokers match the supply and demand orders that they receive. But rather than being a continuous market, as an interbank market would be, a double auction is run at discrete points in time, like a fixing session. Such an approach may be appropriate when a country lacks the institutional capacity or experience to operate an interbank market, but some of the flexibility of the interbank approach is desirable. Since the main goal is to encourage trading, not only at the time of the auction but also on a more continual basis, double auctions can be seen as a useful intermediate step. Ultimately, under a floating exchange rate system, governments should work toward the development of an interbank market.

Conclusions

Auctions offer the advantage of simplicity in determining market-based prices in countries where markets may be thin or nonexistent and in allocating the auctioned items efficiently. The appropriate choice of auction format is less clear-cut. This ambiguity stems in part from the difficulties in applying theoretical results to real world settings and in part from the importance of individual country circumstances.

Our review of auction techniques suggests that uniform, second-price auctions, because of their administrative simplicity, economic efficiency, and revenue-enhancing potential, are perhaps the most widely applicable format. The ascending-price, English auction may be preferred for auctioning government securities or refinance credit. But unless individual country circumstances provide for a bidding forum conducive to the open-outcry format, this mechanism is technically infeasible. In addition, the English auction is, potentially, the format most prone to collusion and should be avoided if prevailing institutional arrangements are conducive to side deals. When collusion is a concern, discriminatory auctions should be considered. Most important, however, auctions should be conducted competitively in all formats with stringent safeguards against monopoly positions. ■

For a more complete discussion, see "Auctions: Theory and Applications" by the authors in IMF Staff Papers, *September 1993.*

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The Internationalization of Emerging Equity Markets

MICHAEL G. PAPAIOANNOU AND LAWRENCE K. DUKE

EQUITY MARKETS are emerging in developing countries and economies in transition around the world. As the governments of these economies institute macroeconomic and institutional reforms, international investors are gaining confidence in and directing capital flows toward the new markets.

In the year ending June 1993, the world's top-performing stock markets were not those of the United States, Japan, or Germany. They were Turkey's (up 111 percent in US dollar terms), Brazil's (up 83 percent), and Indonesia's (up 29 percent). Markets in Hong Kong, Singapore, and the Philippines have also delivered high-return performances in US dollar terms recently.

These equity markets, most of which evolved in the late 1970s and early 1980s, have emerged as part of the development process of many countries and have only just begun to be accepted in the global marketplace. The early markets, which were characterized by low liquidity, high volatility, and reduced efficiency, have become increasingly active due to increases in the types and volume of securities they offer; more stable, government-mandated macroeconomic policies; and decreased regulation that allows easy access to investment information.

Embryonic equity markets with the same characteristics are emerging throughout the developing world—in Viet Nam, Ghana, and Guyana, for example—and in the former centrally planned economies of Eastern Europe and the Soviet Union (most notably in Bulgaria, the Czech Republic, Russia, Ukraine, and the Baltic states). As financial reforms take root in many countries and market institutions appear in the economies in transition, equity market activity is expected to grow, resulting in surges in trading volumes and stock price movements similar to those in Mexico in 1991 and Korea in 1992–93.

These equity markets are the products not only of domestic capital demand but also of the willingness of investors to place their funds in less developed countries. The reform process in both the developing countries and transitional economies has allowed the markets to develop as alternate sources of capital for entrepreneurs and government-owned companies attempting to privatize. In particular, capital demand has been generated by fast-growing, export-oriented companies operating with low-cost resources and technology transfers. The combination of these two factors often produces large profit margins for corporations, resulting in higher equity returns than those in the more established markets, as well as greater opportunities to diversify international portfolios.

The stages of development

Though each emerging market has its own idiosyncracies, it is possible to offer a broad description of several phases common to all equity markets. It should be noted here that the duration of these phases may vary according to the country and time frame within which an emerging market's evolution occurs. Periods of global economic expansion tend to accelerate the development of capital markets—emerging equity markets in particular.

Equity markets tend to develop only after a country has achieved a degree of economic and political stability and begun implementing growth-oriented policies. In the initial phase, equity prices tend to rise. As they do, the market gains the confidence of domestic investors and becomes more widely accepted as an investment alternative to traditional bank deposits and often to short-term government bonds. Equity markets in this stage of development currently exist in Belarus, Kazakhstan, Ukraine, and some of the other independent states of the former Soviet Union.

In the second phase, because the equity market now has some degree of credibility, pressure abroad for greater accessibility and at home for cheaper capital funding leads to a loosening of regulations in the domestic capital market. As market liquidity increases and risk-adjusted returns rise, international investors begin to realize the diversification benefits of investing in such markets. The equity markets in Brazil, China, Colombia, India, Pakistan, Peru, the Philippines, and Poland have all entered this phase.

In the third, or expansion, phase, the market offers the prospect of higher, less volatile returns, and investors easily absorb new issues of stocks and corporate bonds. The volume of issuance increases rapidly as firms strive to pay down debt and private or newly privatized companies make their initial public offerings. Trading activity increases, producing more effective intermediation, while the growing need for a risk transfer mechanism spurs the development of equity and currency-hedging instruments such as derivatives and index products. Such activity can be found in the markets of Argentina, Hungary, Indonesia, Malaysia, Thailand, and Turkey.

In the final, or mature, phase, as equity risk premiums fall to internationally competitive levels relative to government treasury bill rates or equivalent short-term money market rates, the equity market begins to achieve the stable growth that marks a mature or developed state. Greece, Hong Kong, Korea, Mexico, Portugal, Singapore, and Taiwan Province of China all have such markets.

Problems and risks

Despite their potential benefits, emerging equity markets carry as much risk as—and sometimes more than—more developed markets. In addition to the dangers of economic and political instability, other obstacles facing investors in developing countries and economies in transition include sharp equity price fluctuations, limited availability of trading instruments, and inadequate monitoring of insider trading activity. Institutional investors also face bureaucratic restrictions that can limit market access, hinder the settlement of payments, and make the clearing system unwieldy. In the last two or three years, a number of countries—especially Mexico and Korea—have initiated serious efforts to eliminate or reduce many of these obstacles.

Frequently, emerging markets must deal with unique macroeconomic and political risk factors associated with unsettled macroeconomic policy choices and volatile political situations. The most endemic of the macroeconomic risks are monetary instability, inconsistencies in monetary and fiscal policy mixtures, large budget deficits, and an overvalued exchange rate. Developmental and institutional obstacles are also common, including small capitalization in relation to a country's GNP, limited liquidity of traded instruments, and an outdated and often overregulated financial system.

Macroeconomic policy. Monetary and fiscal policies constitute a major source of risk in equity markets, because monetary instability and fiscal imprudence create financial uncertainty that may seriously impair market functioning and performance. For example, unanticipated inflation transfers wealth and income from lenders to borrowers, driving investors out of securities and into the real assets (such as gold and real estate) that are traditionally believed to offer protection against purchasing power risk.

In their attempt to accelerate the growth of their investment sectors, governments may be tempted to compromise fiscal and monetary discipline by financing certain public or private sector projects through the government budget or preferential credit rates. However, such policy deviations create macroeconomic instability, most often manifested by higher inflation and excessive exchange rate volatility. Russia is currently a classic, if extreme, example of this.

During the implementation of adjustment programs, in particular, countries may be faced with inappropriate mixes of monetary and fiscal policies. For example, strict monetary policy that is not accompanied by serious curtailment of large budget deficits may lead not only to continuing public sector expansion at the expense of the private sector but also to high real interest rates and an overvalued currency. Such a policy mix may aid temporarily in the fight against inflationary pressures. However, it can also hurt exports—and therefore growth potential—as well as capital inflows, since an overvalued exchange rate often inhibits direct and portfolio investment by raising expectations that a currency depreciation will follow.

Economies in transition are faced with other specific problems, among them incomplete or not widely accepted economic reform programs (including liberalization, privatization, and corporate restructuring) and an underdeveloped financial infrastructure that lacks technical managers and is burdened with bureaucratic processes. In such an environment, newly emerging markets must deal with inadequate macroeconomic policies, limited equity exchange listings, and institutions unable to regulate insider trading or protect the property rights of borrowers (companies issuing equity) and lenders (shareholders).

Political risks. Other real-world risks include the possibility that a developing nation's government will nationalize firms, institute high withholding taxes, or restrict the repatriation of dividends and capital. Although such risks can be partly diversified away, they cannot be ignored.

Developmental and institutional barriers. Small capitalization is often regarded as a major barrier for international investors because it limits the available investment choices and may be a factor in the sharp equity price fluctuations of a highly volatile market. Many transitional and developing economies have small domestic markets and less than buoyant business climates characterized by numerous small firms engaged solely in domestic production. Domestic demand may be weak due to low income levels or a small population, while an overly stringent regulatory system and lack of infrastructure may contribute to the unfavorable business climate. In such an environment, only a few firms will be eligible to meet the minimum asset requirements of local equity market listings, and market capitalization relative to GDP will tend to be small.

Lack of liquidity and variety of trading instruments is a major obstacle to international investment in many emerging markets. Small trading volumes effectively shut out large institutional investors, since even what these investors consider small trades would amount to huge transactions for the markets and could lead to dangerously high volatility. In general, the lack of liquidity and depth depresses financial transactions and reduces market efficiency. Liquidity may depend to some extent on governmental initiative in providing an appropriate legal and accounting system to ensure the transparency of financial transactions.

Regulations are among the most common institutional barriers that limit foreign investment. International investors face constraints of one kind or another in most of the

world's capital markets, but the limitations are most severe in emerging markets. Restrictions and controls on capital flows and exchange transactions, barriers on market entry and exit, inadequate information on securities transactions, a small number of market makers and brokers, and high transaction costs and brokerage fees sharply restrict international investment in many developing countries.

Financial intermediaries, in particular dealers and brokers, must be able to operate under specific legislation that guarantees compliance with agreements and contracts. Emerging equities markets develop and function well only if participants have confidence in the efficient workings of the financial market system, trust that the rules of honest trading prevail, and accept specialized government institutions as arbiters in disputes.

Furthermore, *differences in accounting rules and settlement standards* between developing and developed countries often complicate investment decisions. For example, the absence of an adequate settlements system in Poland means that investors must make a down payment of about one third of any equity purchase before placing their order. Also, international investors may be constrained by internal company-specific or country-wide provisions on the proportion of foreign assets they can hold in their portfolios. However, these constraints have been relaxed in countries around the world as the trend toward deregulation accelerates.

Promoting emerging markets

Many governments of countries with emerging markets have adopted macroeconomic and structural adjustment policies, as well as other institutional changes, in order to ensure a sustainable, noninflationary growth path and promote portfolio investment. Most often, emerging market economies have followed relatively strict macroeconomic policies in a growth-oriented framework and have implemented numerous financial system reforms; these are the policies that have begun to win acceptance for the emerging markets in global financial markets.

Stabilization policies. It is important to note that many of these governments—for example, in Portugal and Indonesia—have succeeded in instituting growth policies without adversely affecting fiscal balances or monetary discipline, bringing inflation and exchange rates under control and minimizing public sector spending. As a result, private investment and overall domestic demand have grown and the number of larger firms operating in such economies has increased, raising the ratio of market capitalization to GDP.

As part of their structural adjustment efforts, many emerging market economies have succeeded in cutting budget deficits. In addition, they have reduced the economic role of the state through privatization by liberalizing internal and external trade, easing controls on capital flows, and passing legislation encouraging market liquidity and the development of larger firms.

Institutional reforms. In addition to following prudent macroeconomic policies, many governments in countries with emerging equity markets have paid close attention to institutional factors that inhibit portfolio investment by holding down the size of corporations and keeping market liquidity low. These factors include the tax and accounting systems, the legal framework, the financial infrastructure, and often cumbersome bureaucratic procedures.

Many of these governments have also instituted accounting systems that are perceived as fair and accurate and, in doing so, have gained investors' confidence. Laws have been passed ensuring that private contracts are honored and enforced and that appropriate dispute resolution mechanisms exist. Special committees have been instituted to oversee laws and regulations dealing with the transparency of financial transactions. Thailand, for example, has recently implemented measures enforcing fair equity trading and tightening certain disclosure rules.

Governments have attempted to improve financial infrastructures by allowing the computerization of equity market dealings, simplifying procedures for listing firms in the equity markets, and relaxing antiquated standards for accepting brokers and brokerage houses in equity transactions, significantly reducing transaction costs and management fees. Malaysia and Singapore have both championed such changes.

The Far East Asian countries, most notably Korea, are prime examples of the success of such measures during the past decade. These markets have been able to attract large inflows of foreign capital as international investors gain confidence in the improved climate the reforms have brought about. Korea's capital inflows, in the form of portfolio investment, rose from $811 million in 1990 to $3,116 million in 1991 and $5,742 million in 1992. The result has been sharp prices rises in these equity markets.

Liberalizing the regulatory structure. In order to remain competitive in today's global marketplace, governments with emerging equity markets are, to a large degree, following the general trend of relaxing excessive controls and regulations on financial systems. In the 1980s, financial liberalization included the relaxation of restrictions on international capital flows and a shift toward more flexible exchange rate arrangements.

The pace of financial liberalization has varied widely across economies, with a small number—such as that of Singapore—moving quickly and the majority (Korea, Mexico, and Turkey, for example) following a more gradual process. In Korea, liberalized interest rates resulted in positive real interest rates that contributed to significant financial deepening. The ratio of broad money supply (including nonbank financial assets, particularly corporate bonds and commercial paper) to GDP rose sharply in 1980s, reaching over 100 percent in 1989. This increase reflected the relaxed regulatory environment of the nonbank financial institutions and their ability to offer higher yields on financial instruments than banks. However, Korea suffered setbacks in its financial liberalization efforts and, toward the end of the 1980s, resorted to some informal direct controls to help offset the monetary impact of the large balance of payments surpluses.

Foreign exchange controls in particular have been eased gradually, in line with improvements in government finances, overall macroeconomic policies, and the development of a legal and institutional framework for financial markets. In most countries, such controls have eventually been eliminated—for example, in Greece, Mexico, and the Philippines. Without sufficient limits on international capital flows, however, and with liquidity increasing in domestic secondary markets, countries with undeveloped equity

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markets could face capital flight problems and find their foreign exchange reserves endangered if the international financial community questions their macroeconomic policies.

Finally, many governments have moved away from both direct and indirect intervention in capital markets that could interfere with the process of disseminating equity market information. Financial markets produce and distribute information on returns and risks efficiently through interest rates and securities prices, permitting savers, investors, and borrowers to make rational choices among competing investment options. Government intervention restricts access to this process, which is the primary source of information for investors comparing the risk and return characteristics of alternative capital investments and for entrepreneurs trying to determine the best means of acquiring capital.

Other measures. In addition to pursuing prudent macroeconomic policies and abolishing credit and exchange restrictions, governments in countries with emerging equity markets have tried to encourage portfolio investment by offering investors a sufficient level of liquidity, along with a variety of securities in different sectors and industries, in the process enhancing diversification within and among markets themselves. Many of these governments have offered their securities in more established stock markets as a way of improving liquidity. The US Securities and Exchange Commission, for example, allows American Depository Receipts to be used as vehicles to trade foreign stocks on the New York Stock Exchange.

Prognosis

Many equity markets in developing countries have had attractive relative valuations during the past decade. Individual issues have often been underpriced, as is evidenced by the faster growth of their economies, on average, in relation to those of more developed countries. If history is any guide for the future, the equity markets in these countries will eventually catch up in relative size and valuation to those of developed countries. When this happens, the opportunities these markets offered in their early stages will gradually evaporate.

In the coming years, well-established emerging equity markets are also expected to play an important role in helping to fulfill the financial requirements of developing countries and the economies in transition through effective mobilization of domestic and foreign capital resources. As a result, these countries have the potential to rely much less on official and private debt to finance their development, as compared with developing countries of the last generation. The only requirement for the successful functioning of these emerging equity markets is that their governments follow prudent macroeconomic policies and institute decisive capital market reform programs. Well-functioning emerging equity markets will lead to the most efficient allocation of available capital resources, in turn spreading efficiency to other sectors of their economies. ■

An extended version of this paper was presented at an international seminar in Shenzen, the People's Republic of China, in 1992 and is forthcoming in the Journal of Investing, *as "Accessing Emerging Stock Markets: Prerequisites for International Investors."*

Edited by Dean T. Jamison and W. Henry Mosley, with José-Luis Bobadilla and Anthony R. Measham

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Are Economywide Policies Good for the Environment?

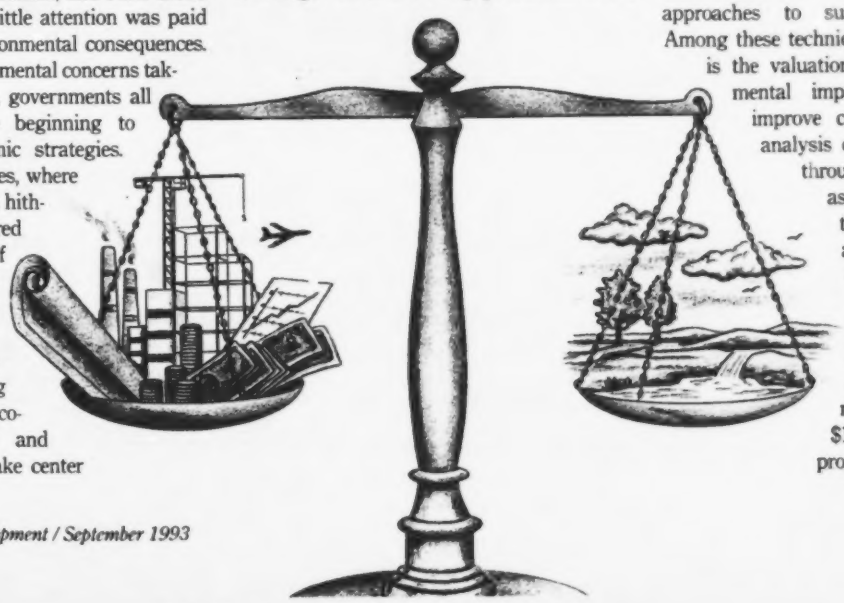
MOHAN MUNASINGHE, WILFRIDO CRUZ, AND JEREMY WARFORD

THE DYNAMICS between economywide policies and the environment are complex—policy reforms hold the potential to either help or hurt the environment. Typically, liberalizing moves help both the economy and the environment, so there are "win-win" gains to be had. But when the opposite occurs, the negatives can be held in check by more specific mitigating measures.

Until recently, when governments made decisions on foreign exchange rates, international trade, agricultural subsidies, and other broad economic measures, little attention was paid to the potential environmental consequences. But now, with environmental concerns taking a higher priority, governments all over the world are beginning to rethink their economic strategies. For industrial countries, where the quality of life has hitherto been measured mainly in terms of growth in net material output, pollution in particular is recognized as a serious threat. For developing countries, where economic development and poverty alleviation take center stage, both pollution and natural resource degradation are seen as serious impediments.

At root is a desire for "sustainable development"—that is, the pursuit of strategies that will permit continuing improvements in the present quality of life at a lower intensity of resource use. Sustainable development necessarily involves the pursuit of economic efficiency, social equity, and environmental protection. In particular, it requires policies and projects to be designed and implemented in such a way that environmental degradation (much of which hits the poor the hardest) is anticipated and minimized, rather than just reacted to after the damage has occurred. But to do this, policymakers and project planners would need a good understanding of how economywide policies, not just specific projects, affect the environment, and on this score, very little work has been done.

For that reason, the World Bank recently launched a study to better understand the complex interactions between economywide policies and the environment. A typical question might be: If farm crop prices rise in the context of an adjustment program that involves either liberalization of the entire economy through a general devaluation or more targeted agricultural price reforms, would this help or hurt the environment? Generalizations are hard to make—indeed, each situation needs to be examined on a case-by-case basis. However, the evidence does show that in most cases, macroeconomic reforms help the environment, and when they do not, specific or localized mitigating adjustments can be made to limit or offset any environmental damage.



Environmental economics

The field of environmental economics, although relatively new, has been able to adapt and extend conventional economic principles to decisionmaking at various levels in modern society, ranging from the local to the global. By adapting and extending such standard methods—especially to identify options for the efficient use of natural resources and the management of pollution—environmental economics plays a key bridging role between the economic, ecological, and social approaches to sustainable development. Among these techniques, the most advanced is the valuation of microlevel environmental impacts, which helps to improve conventional cost-benefit analysis of projects. As a result, through its environmental assessment procedures, the World Bank has made a start in incorporating environmental concerns into project design—potentially affecting an annual pipeline of more than 200 investment projects worth over $11 billion. Continued progress in this area is

extremely important, given that conventional development projects often have serious environmental effects.

However, economic policies that go beyond the local project level frequently have even more potent effects, something the Bank has recognized for a long time. In particular, for many decades policy reforms contained in the adjustment process—particularly in sector adjustment lending—have included elements that affect natural resource use and the environment. For example, rationalizing of electricity and water prices and removing subsidies for pesticides have been standard objectives of project and sector lending.

Even so, there is no question that the general lack of knowledge about links between economic policies and the environment serves as a real handicap for the Bank. It delays attempts to gradually expand the application of environmental assessments to cover policy-based lending—the second largest use of Bank resources (about $5.8 billion annually, or 27 percent of total lending). It also hampers efforts to develop more effective national Environmental Action Plans (these are prepared by borrowing countries, with Bank assistance, to help determine priority activities to address national environmental issues).

In an effort to better understand how economywide policies affect the environment, the Bank conducted a series of case studies, which were carefully selected to reflect a wide range of country situations and environmental problems. The studies examined two basic types of policy reforms: efficiency-oriented sectoral pricing reforms, and sectoral and economywide changes that alter both prices and the basic structures of the economy.

What the study found

Although no simple generalizations can be distilled, a few key patterns did emerge—some of which imply that policymakers may need to rethink their economic strategies.

Getting prices right helps the environment—but it is not enough. The studies reinforced the long-held belief that improving the price system and correcting for market failures will help the environment because it decreases the incentive to exploit resources wastefully. This is important for the Bank because it has traditionally advocated reducing subsidies in key sectors, such as energy and water, on efficiency grounds.

In Sri Lanka, for example, as in most developing countries, electricity prices have been well below the incremental cost of ensuring future supplies. This means that there is a wasteful use of energy, which, in turn, will result in excessive emissions of particulates and sulphur dioxide. Thus, a more efficient use of energy induced by energy prices that reflect marginal cost would result in lower air pollution. This is further supported in the India study, where growing demands for water in agriculture and industry in Jamshedpur is a critical resource management problem. Water is increasingly scarce, but is substantially undervalued. Most subsidized industrial users pay only $.07 per cubic meter of water when the going rate from private suppliers is $.13. The answer to better water use lies in adjusting prices to reflect either the cost of supplying the water or the benefits foregone by diverting it to other uses.

While prices that reflect baseline economic costs are clearly important, the ideal environmental pricing approach requires accurately valuing environmental degradation and imposing equivalent additional taxes on those who cause the damage. However, such a "pure" approach is often not feasible because of weak institutions and administrative constraints in many developing countries. This means that blunter instruments or combinations of pricing and regulation may be more practical—something that may come as a surprise to many economists. The study on Mexico City showed, for example, that a "taxation-only" or "regulation-only" approach is not practical; instead, Mexican officials might want to combine the two approaches.

Exploit the "win-win" cases. Although the results on the environmental implications of sectoral and macroeconomic reforms were case specific, some basic lessons emerged. The studies showed that because the main patterns of resource or environmental degradation are caused by market failures, or long-standing policy or institutional distortions, the environmental implications of economywide reforms will be generally beneficial for both the economy and the environment.

First, take the issue of subsidies. Although these are typically imposed to promote an investment or social goal, they often encourage wasteful resource use. A well-known example is the system of tax breaks and cheap credit that promoted cattle ranching and the conversion of Amazonian forests to unsustainable pasture. The Mexico case study shows that industrial subsidies can have similar negative environmental effects in terms of pollution. Between 1970–89, industrial pollution intensity in Mexico increased by 25 percent, induced by government investments and subsidies in the petrochemical and fertilizer industries. Energy intensity of industry also increased by 5.7 percent in the same period. Moreover, these subsidies are costly. Broad subsidies for fuels and electricity absorbed $8–13 billion, or 4–7 percent of GDP, from 1980–85.

The same pattern can be seen in the agricultural sector. In Tunisia, the government tried to protect herders from wide income fluctuations during drought by subsidizing feed imports. This allows herders to increase the number of livestock continuously, breaking the cycle where, during droughts, herd sizes contract. But it also leads to greater pressures on limited grazing lands, such as in the southern arid region, and thus land degradation. Of the 10.6 million hectares involved, more than half are already moderately to severely degraded. Thus, replacing such subsidies with more direct transfers could continue to protect the poor in the short term while reducing the long-term degradation of pastures.

The environment and adjustment lending

For many years now, the World Bank has advocated integrating environmental concerns into economic reforms, and as a recent study shows, the rhetoric is being translated into action.

A review of Bank adjustment lending operations over the period FY88–FY92 found that about 60 percent of the sampled loans explicitly included environmental goals or loan conditionalities addressing environmental concerns in agriculture, forestry, energy, trade, and industry. This was up sharply from only 37 percent during the FY79–FY87 period. Moreover, the recent loans encompassed a much wider range of policy instruments or sectoral strategies (e.g., from energy and resource pricing reforms to institutional capacity building).

For the study, the Bank selected 81 loans, which represented about 65 percent of total adjustment lending during the FY88–FY92 period. This included 47 structural adjustment loans and 34 sectoral adjustment loans in 58 countries spread throughout the developing world. The rest of the loans were excluded, because they were mostly financial sector adjustment programs considered to have no direct—or traceable—implications for the environment.

One caveat, however. It is important to note that such lending operations have specific, fairly short-run objectives, and the loans are meant for rapid disbursement. While environmental objectives can, and increasingly are, built into loan conditions, there are many other environmental goals that require long-term institutional and capacity reform and for which adjustment lending is not an appropriate instrument.

Source: "The Evolution of Environmental Concerns in Adjustment Lending: A Review," by Jeremy Warford, Adelaida Schwab, Wilfrido Cruz, and Stein Hansen, World Bank, February 1993.

Policy issues	Policy reforms	Direct objectives/effects	Indirect (environmental) effects
Trade deficits	Flexible exchange rates	Promote exports; reduce imports	Export promotion may lead to more deforestation for export, but it could also lead to substitution of tree crops for annual crops. In addition, industrial job creation may reduce pressures on land resources
Food security and unemployment	Agricultural intensification in settled lands and resettlement programs for new areas	Increase crop yields and acreage; absorb more rural labor	May reduce spontaneous migration to ecologically fragile areas. However, there is potential for over use of fertilizers and chemicals
Lack of industrial competitiveness	Reduction of tariffs and special incentives	Promote competition and industrial efficiency	More openness may lead industry to adopt more energy-efficient or less pollution-prone technologies. However, it may also lead to influx of hazardous industries

A second issue involves broader policy reforms, such as liberalizing foreign exchange. In Zimbabwe, wildlife-based tourism contributes substantially to the economy. This sector grew at the rate of 13 percent in 1991, comprising 5 percent of GDP. Wildlife-based activities, unlike cattle ranching, with which they compete for limited land resources, are better suited to the country's semi-arid climate and poor soils. The direct advantage is that economically viable systems can be maintained with lower stocking rates than those associated with commercial cattle ranching. Equally important is the indirect environmental benefit of conserving a natural habitat that appeals to visitors.

However, for many years, the government's foreign exchange and trade policies have penalized this sector. Overvaluation of the Zimbabwean dollar (50–80 percent from 1981–90) meant that export-oriented sectors were implicitly taxed, among them wildlife and nature tourism concerns. Foreign exchange earnings were diverted to other sectors, depressing incomes and investment in wildlife. In 1990, the currency was devalued by 25 percent as part of an adjustment package, and more liberal access to foreign exchange was allowed. These moves were beneficial on both economic and ecological fronts. Exports increased; at the same time, the profitability of the wildlife sector increased, leading to an expansion of land allocated for wildlife—an environmentally desirable outcome.

Trade liberalization in Indonesia also illustrates the "win-win" principle, but points to the urgent need for regulation as a complement to policy reform. Accelerated industrial growth, while clearly desirable for poverty reduction, often brings with it increased pollution. The Indonesia study shows how reforms can mitigate some of the pollution problems associated with growth. In terms of emissions per unit of output, or pollution intensity, the study found that processing industries (e.g., food products, pulp, paper) tend to be dirtier than assembly (garments, furniture) industries. Liberalization in the 1980s promoted a surge in assembly industries, thereby reversing the 1970s pattern of more rapid growth in "dirty" processing sectors.

In addition, industry expanded rapidly outside densely populated Java, reducing the health impact of industrial concentration. However, industrial output growth has been so rapid that general pollution levels have nevertheless increased. Thus, reduced pollution intensity and industrial decentralization are not enough to control pollution; formal regulation will still be required to avoid severe health and environmental damage in the future.

Break the negative links. Clearly, reducing market failures and policy distortions should be both economically and ecologically beneficial. But sometimes this is not the case because policy reforms are undertaken while long-standing distortions or institutional problems persist (e.g., where trade reforms are implemented while resources continue to be underpriced, or resource ownership remains uncertain). However, even in these instances, conventional economic benefits may still be substantial. This means that policymakers should still proceed with the economic reforms and mitigate the adverse environmental impacts by adopting complementary environmental measures.

In particular, property rights or tenurial problems can undermine the contribution of certain reforms. In Western Ghana, as in many regions in Africa, agricultural lands are governed by traditional land use institutions, where farms are communally owned by the village or tribe. These common property regimes may have been sufficient in allowing sustainable use of agricultural lands when populations were much smaller. However, with rapid population growth and lack of employment opportunities, there is increasing pressure on land resources.

Under these conditions, increases in domestic agricultural prices, associated with trade reforms, have accomplished the expected goal of increased rural output. However, they have also led to an expansion of cultivated area, reduced fallowing, and consequently a decline in land fertility and productivity. Explicitly incorporating the effect of this environmental change reduces the otherwise substantial positive effect of the reform on agricultural output. In this case, complementary institutional reforms will be needed to ensure that the current income improvements from adjustment reforms will be sustainable.

Pricing reforms can also be undermined, as is the case in Eastern Europe, by a need for more privatization. The former centrally planned economies of this region have been burdened by the legacy of low energy prices and the lack of an incentive system for efficient resource utilization. But with the massive economic restructuring underway, in recent years energy prices and pollution charges have been rising. In Poland, for example, energy prices doubled in 1988 (although they still remained only about half of Western European prices); coal prices increased from $6 per ton in 1989 to $37 per ton in 1992.

While there has been some decline in pollution and energy intensity, there is a concern that price increases have not had as large an impact as would be expected in a market economy. The study found that soft budget constraints have allowed firms to pass on additional input costs or taxes to the government or consumers. This means that promoting budget accountability through privatization and banking reforms is important to increase the effectiveness of price rationalization.

Policy relevance of studies

The challenge presented by these studies is the need to increasingly incorporate environmental components in policy reform efforts. Since the mid-1980s, environmental issues have been more important in Bank structural adjustment loans and sectoral adjustment loans, and this trend is expected to continue (see box on page 41).

Resource/environmental management issue	Sectoral economic characteristics	Relevant policy reforms
Agricultural expansion and deforestation	Many small, competitive decisionmakers are involved	Reduction of taxes and subsidies
	Outputs, inputs are mostly internationally traded	Exchange rate and trade reforms
	Government implements substantial production subsidies and trade intervention	Poverty and income distribution policies
		Property rights reform
Water depletion and degradation	Supply side is dominated by government or monopolies; bulk of resource use goes to large commercial enterprises and irrigation systems	Intersectoral pricing
		Reduction of subsidies and introduction of charges for resource degradation
	Resource is not internationally traded but sectoral use and productivity for main user groups substantially differ	
	Prices are highly regulated	
Energy use and air pollution	As with water, supply side dominated by government and monopolies	Exchange rate reforms
		Reduction of cross-subsidies
	Inputs (coal, oil) are generally traded; output broadly linked to all production activities	Privatization programs for generating and distributing activities
	Sectoral investment and pricing highly centralized	

For developing country policymakers, who always have to balance environmental concerns with economic and social benefits, these studies suggest how the environmental assessment of policy reforms might be initiated. In a country specific context, a matrix such as that presented in Table 1 would be very useful from the viewpoint of economic planners, especially those involved in the ministry of finance, ministry of planning, or key sectoral ministries.

Policy changes—such as industrial protection reform—can have both positive and negative implications, depending on the nature of intervening conditions. Thus, to properly evaluate broad policy reforms, decision makers need to first identify the direct and indirect effects, as well as assess any trade-offs between conventional development contributions and environmental effects. Then they would be in a good position to design remedial measures that would help mitigate any negative effects or enhance the positive impacts of the economywide policy on the environment.

The results would also be useful from the viewpoint of environmental policymakers, such as environment ministry officials charged with preparing the national Environmental Action Plan. For them, the key question is which policies would substantially affect a high priority environmental issue. Here, it is possible to identify specific policies that typically affect certain types of environmental issues (Table 2). For example, if air pollution is a major concern, then the relevant policy would involve energy prices; for deforestation, foreign exchange and agricultural price policies; for water availability and quality, domestic price policies; and for energy efficiency, trade and exchange rate policies.

Ideally, both of these assessments should be undertaken within the same comprehensive framework of national decision-making. However, in practice, institutional rigidities often prevent such coordination, which in turn leads to different priorities among economists and environmentalists, and sometimes to the adoption of conflicting economic and environmental policies. ■

The World Bank study on economywide policies and the environment included these studies:
Ghana: Effects of trade and employment policies on agricultural extensification (Ramon Lopez)
India: Intersectoral water pricing issues (Ramesh Bhatia and Rita Cestti)
Indonesia: National economic policy and industrial pollution, 1975–1989 (David Wheeler)
Mexico: Fuel taxation and industrial pollution issues (Gunnar S. Eskeland and Adriaan Ten Kate)
Poland: Economic restructuring and energy use (Robin Bates and Shreekant Gupta)
Sri Lanka: Effects of global climate-related constraints and national energy policies on resource management (Peter Meier and Mohan Munasinghe)
Tunisia: Livestock policies and environmental impacts during economic adjustment (Zeinab Partow and Stephen Mink)
Zimbabwe: Economic policy and wildlife management (Jan Bojo, Kay Muir, and Rob Cunliffe)

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Trade Reform in Latin America and The Caribbean

ASAD ALAM AND SARATH RAJAPATIRANA

WHAT IS the key to successful trade reform in developing countries? The reforms that took place in Latin America and the Caribbean in response to the economic shocks of the early 1980s offer several lessons for implementing trade reform programs that will produce more open, globally oriented trade regimes.

During the 1980s many Latin American and Caribbean countries undertook far-reaching and fundamental trade policy reforms that have resulted in increasingly outward-oriented trade regimes. The reforms were spurred by a number of factors: the debt crisis that began in 1982, the success of outward-oriented regimes in other parts of the world, an international environment that increasingly favored liberal trade policies, and the positive results of domestic macroeconomic stabilization.

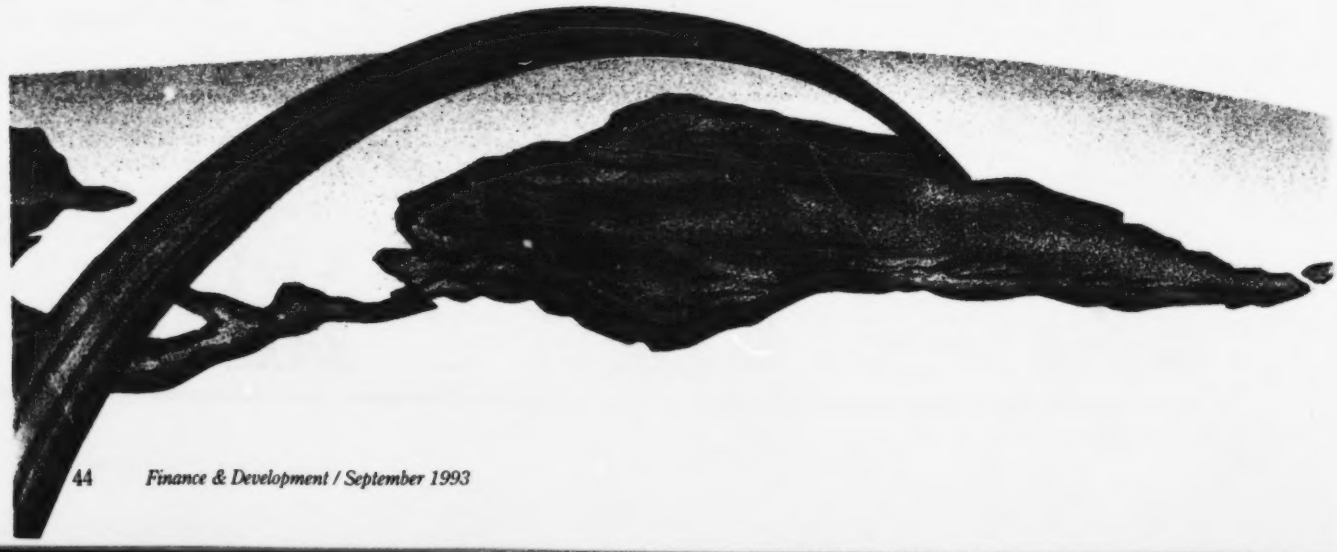
While Latin American and Caribbean countries had experienced sporadic macroeconomic crises in the past, those of the 1980s were especially harrowing. The two oil shocks of the 1970s raised import prices at a time when growth was already slow. Later, when interest rates rose, countries that had borrowed heavily to finance high import bills and sustain an investment boom in the public sector found themselves with growing debt burdens. Further borrowing to finance high deficits soon became impossible. Structural adjustment, including extensive trade reforms, was inevitable.

At the same time, the political regimes in many countries that undertook trade reforms were becoming more open to democracy. The economic crises that these countries experienced may in fact have acted as a catalyst for political change and democratization, especially in Argentina, Brazil, Chile, Venezuela, and Uruguay.

The trade reforms

When the trade reforms of the 1980s began in 16 Latin American and Caribbean countries—Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Jamaica, Mexico, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela—most of the countries had numerous trade barriers in place: high tariffs, foreign exchange restrictions, multiple exchange rates, quantitative restrictions on both imports and exports, and export taxes. Many of these barriers had been raised during the early 1980s in an effort to respond to balance of payments crises and had further reinforced, in varying degrees, the inward orientation that characterized these countries' trade policies for much of the postwar era.

The extent and timing of the reforms differed among the countries, depending in part on their macroeconomic situation and the particular protectionist instruments that characterized their pre-reform trade regimes. Because the only significant trade restriction in place in Chile, for example, was a uniform tariff rate of 35 percent, the trade reforms initiated in 1985 simply reduced this rate. In Peru,



Country (pre-reform year, post-reform year)	Average unweighted legal tariff rates (percent)		Tariff range (percent)		Coverage of Quantitative Restrictions (QRs) on imports (percent of tariff lines, unless otherwise noted)*		Openness of economy (imports + exports as percent of GDP, 1980 prices)	
	Pre-reform	Post-reform	Pre-reform	Post-reform	Pre-reform	Post-reform	Pre-reform	Post-reform
Argentina (1987, 1991)	42 P	15	15–115 P	5–22	62 [1]	A few	38.57	54.32
Bolivia (1985, 1991)	12 M	8	NA	5–10	NA	Minimal	57.51	83.97
Brazil (1987, 1992)	51	21	0–105	0–65	39	Minimal	21.17	25.27
Chile (1984, 1991)	35	11	35	11	Minimal	0	44.96	56.34
Colombia (1984, 1992)	61	12	0–220	5–20	99	1	28.23	32.66
Costa Rica (1985, 1992)	53 P	15 P	0–1400 P	5–20	NA	0	58.66	78.97
Ecuador (1989, 1992)	37 P	18	0–338 P	2–25 [2]	100	0	48.73	50.84
Guatemala (1985, 1992)	50 P	15 P	5–90	5–20	6 [1,3]	0 [3]	31.31	35.56
Honduras (1985, 1992)	41 P	15 W,P	5–90	5–20	NA	0	62.82	61.76
Jamaica (1981, 1991)	NA	20	NA	0–45	NA	0 [4]	105.51	163.49
Mexico (1985, 1990)	24 W	13 W	0–100	0–20	92 [1]	20 [1]	22.63	34.31
Paraguay (1988, 1991)	NA	16	NA	3–86	NA	A few	51.01	63.14
Peru (1988, 1992)	NA	17	0–120	5–25	100	0 [4]	30.37	41.58
Trinidad & Tobago (1989,1991)	NA	41 P	NA	0–103 P	NA	A few [5]	124.89	141.21
Uruguay (1987, 1992)	32	18	10–55	12–24	0	0	38.04	45.10
Venezuela (1989, 1991)	37	19	0–135	0–50	40	10 [6]	49.25	53.29

Source: World Bank (various reports, staff estimates, and ANDREX).
* Even where tariff line coverage is small, domestic production coverage may be significant.
P: including tariff surcharges; M: import-weighted average tariff; W: production-weighted average tariff.
[1] Of domestic product.
[2] Ecuador also has a specific tariff of 40 percent on automobiles.
[3] Guatemala has significant QRs for health and safety reasons; pre-reform, they covered 29 percent of domestic manufacturing production.
[4] Some QRs do exist for health and safety reasons.
[5] On agricultural products only.
[6] Another 8 percent of tariff items are restricted because of health reasons; pre-reform, the number was 5 percent.
NA: Not available.

on the other hand, trade policy had been characterized by high levels and dispersion of tariffs, extensive nontariff barriers, an overvalued exchange rate, a multiple exchange rate system, fiscal and financial subsidies for exports, export taxes and restrictions, and rampant use of discretion in the conduct of trade policy. Peru's reforms, which began in 1989, were much more extensive.

While many of the reforms were begun at various times during the 1980s, some countries—specifically Argentina, Chile, Colombia, Peru, and Uruguay—had initiated reforms in the 1970s. Some of these were in part reversed in the early 1980s in the wake of the macroeconomic crises. Chile, which was among the first to undertake trade reforms in 1974, had an open and transparent trading system in 1980, with a low uniform tariff rate of only 10 percent and no nontariff barriers. After a brief partial reversal of these reforms in the early 1980s, Chile restarted the process of lowering its import barriers in 1985.

The reforms of the 1980s were aimed at replacing the prevailing inward orientation of the trade regimes with neutral incentives for imports and exports. Reforming import policy involved dismantling the tariff structures and eliminating nontariff barriers such as quantitative restrictions, official reference prices, and foreign exchange allocations. Export policy reform entailed reducing or eliminating price and quantitative barriers to exports and introducing or improving measures for export promotion and diversification.

The process of trade reform, specifically the reduction of protectionist barriers to imports and the emphasis on export expansion, led these countries to seek General Agreements on Tariffs and Trade (GATT) membership, not only to bind themselves to GATT regulations but also to lock in their own trade reforms. GATT membership reinforced and expanded the reform process by forcing the adoption of GATT-consistent rules on customs valuation, antidumping, and subsidies. The 16 countries have continued to seek more active participation in the multilateral trade negotiations in areas critical to them, such as agriculture and textiles.

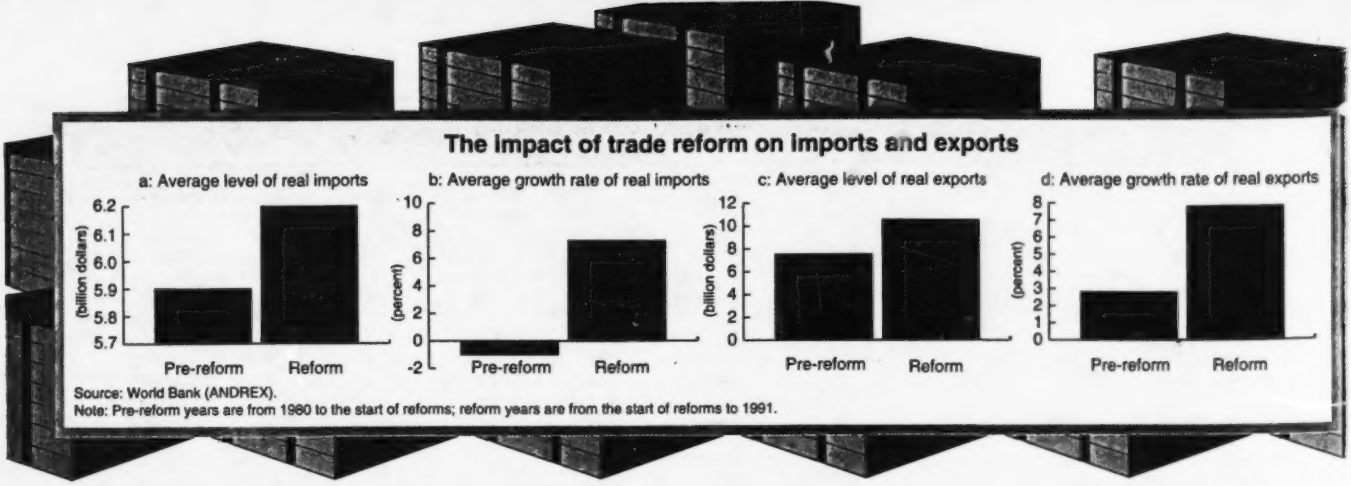
The effects of trade reform

The extensive trade reforms in these countries produced some dramatic results. A comparison of certain features of the 16 trade regimes before and after the reforms shows several common developments (see table).

First, nominal protection, as indicated by average tariff rates, was reduced dramatically. The reduction was more substantial in some countries (Brazil, Costa Rica, and Colombia, for example) than in others. In addition, the reforms substantially narrowed the range of tariffs, reducing the variance in protection; most of the current ranges include only a few tariff rates. The Central American countries now have only four legal tariff rates, Jamaica five, and Uruguay just three. Only Chile has a uniform tariff rate, however. While tariffs are down sharply from pre-reform levels, they are still high compared to those of industrial countries.

Second, quantitative import restrictions were also sharply reduced and are now negligible in almost all 16 countries. However, other forms of nontariff barriers remain in some countries. Uruguay still has some significant reference and minimum import prices, and Costa Rica has a prior deposit requirement of 30 percent of the value of imports. Some nontariff barriers are more sector specific, such as the local-content rules that limit imports of automobile parts in Argentina, Chile, and Colombia.

Finally, the degree of openness, as measured by the sum of real exports and imports as a ratio of GDP, has increased significantly for all the countries. The overall average has climbed from a pre-reform level of 49 percent of GDP to a post-reform (1991) average of 58 percent, reflecting the positive effects of the changes.



Real imports

The trade reforms had a marked impact on the average levels and growth rates of imports and exports, but the improved import performance cannot be attributed to liberalization alone. The concurrent economic recovery, which raised incomes and increased foreign borrowing, also stimulated imports.

The average level of real imports was higher during the reform years, increasing from $5.9 billion in the pre-reform period to $6.2 billion in the reform period (chart a). Import levels were also higher for 10 of the 16 individual countries. Costa Rica, Jamaica, and Paraguay saw increases of more than 50 percent, and six other countries enjoyed increases of more than 10 percent. Argentina, Colombia, Guatemala, Peru, Trinidad and Tobago, and Venezuela showed a decline in import levels from the pre-reform period, but all except Venezuela experienced an increase over the year immediately preceding the trade reforms.

The picture is more uniform in terms of import growth rates. The overall average growth rate for these countries increased from –1.1 percent in the pre-reform period to 7.2 percent in the reform years (chart b). The import growth rate increased in every country except Venezuela, which began its trade reforms rather late (in 1989); in 1991, however, the country saw its import growth rate rise by over 50 percent. Six countries had average annual increases of over 10 percent, with Mexico showing the greatest increase (24 percent) followed by Argentina and Chile (15 percent). Other countries—Colombia, Honduras, and Jamaica, for instance—showed more modest increases of around 2 percent.

While real imports have increased significantly, they have not shown the surge many expected, for several reasons. First, the trade reforms were introduced along with stabilization and structural adjustment policies that kept domestic demand low; in fact, many countries experienced negative growth rates during this period. Since domestic demand is a major determinant of import demand, import levels have also remained low. Second, in several instances the trade reforms were preceded or accompanied by major real devaluations that raised the domestic currency price of imports and kept them depressed. Third, foreign borrowing was no longer as readily available as it had been before the debt crisis of 1982.

Real exports

The average level of real exports also increased during the reform years, climbing some 38 percent (chart c). Only Guatemala and Peru had lower average export values, but again the levels were higher in both countries than they had been in the year immediately preceding the reforms. The average increase in real export growth rates during the reform period was 5 percent (chart d). Export growth rates increased in 11 of the 16 countries, with 4 countries showing average annual increases of more than 10 percent. Only Ecuador, Mexico, and Trinidad and Tobago experienced significant declines in their export growth rates, while four other countries had declines of less than 1 percent. (Exports showed strong growth in Trinidad and Tobago in 1990 but then stagnated in 1991, and Ecuador's export growth rate has picked up since 1989.)

The context of the reforms

The trade reforms were introduced during a period of widespread economic crises for most Latin American and Caribbean countries, which were suffering from large debt overhangs, declining output, balance of payments problems, falling foreign exchange reserves, and high inflation. The intensity of these problems varied across countries. In the year immediately preceding the reforms, the inflation rate stood at over 1,000 percent in Bolivia, for instance, and at about 60 percent in Ecuador. In the five years preceding the reforms, real output had fallen by 12 percent in Bolivia, although it had risen 17 percent in Venezuela. The extent of the economic crisis is evidenced by the fact that, of the 16 countries initiating trade reforms, all suffered from at least three of the five problems mentioned, and three countries from all five.

For these Latin American and Caribbean countries, the fiscal boom of the 1970s inevitably gave way to the austerity of the 1980s. All the trade reforms were either preceded or accompanied by restrictive fiscal and monetary policies, which reduced real expenditures and facilitated the improvements in the balance of payments that enabled the trade reforms to proceed. Tight fiscal policies also ensured that the accompanying real devaluations of exchange rates were noninflationary.

Exchange rate policy

Exchange rate policy also underwent significant changes during the reform period. Many countries needed to unify their multiple exchange rates in order to reduce dispersion in the effective rates of protection and reduce the discretionary element of government action. (Of the eight countries with multiple exchange rates, all but Ecuador unified their rates during the reform period.) In addition, many countries also needed to adopt realistic exchange rates by making appropriate devaluations or floating their currencies.

In fact, the trade reforms were almost always preceded by or associated with significant depreciations of real exchange rates. In eight countries—Bolivia, Chile, Colombia, Ecuador, Guatemala, Paraguay, Uruguay, and Venezuela—the real exchange rate was continuously depreciated throughout the reform period. For six of these countries—Chile, Colombia, Ecuador, Guatemala, Paraguay, and Venezuela—the depreciations dated from before the trade reforms. Eight other countries—Argentina, Brazil, Costa Rica, Honduras, Jamaica, Mexico, Peru, and Trinidad and Tobago—experienced continuous depreciation of their real exchange rates either prior to or for some portion of the reform years. Of these, Argentina, Costa Rica, and Trinidad and Tobago had real depreciations both prior to and at the start of the reforms.

Only in Peru were trade reforms not aided by real depreciation, despite a substantial depreciation of the nominal exchange rate, since inflation stayed ahead of nominal depreciation. Peru's real exchange rate appreciated during this period due to the country's expanding unofficial exports, weak import demand, and large capital inflows attracted by the relatively high real interest rates that resulted from tight monetary policy.

The period of reform also saw a movement toward floating exchange rates. Just one country, Uruguay, had floated its exchange rate prior to the reforms, but nine more countries had done so by 1991. Some countries that did not float their exchange rates demonstrated greater flexibility in managing their fixed or crawling exchange rate regimes.

The political economy

The success of the trade reforms introduced in the 1980s was in part the result of the determination and boldness with which the governments initiated and pursued them. In many countries, incoming democratic governments adopted austere economic policies—including trade reforms—despite serious political opposition. Governments were willing to take such risky and unpopular steps in large part because the economic crises had irrevocably discredited past macroeconomic and trade policies. There really was no alternative: drastic reform provided the governments' only hope for improving the economic environment and ensuring their own political futures. This conjunction of political and national interests facilitated bold action.

However, to restore economic growth, countries first had to resolve their foreign debt problems and gain access to international lending. Here, the IMF and World Bank became important factors, providing the confidence necessary to undertake strong and wide-ranging trade reforms.

A change in the political regimes in all 16 countries also helped to introduce or invigorate the reforms. In 15 countries (the exception was Chile) the trade reforms began under democratically elected governments. It is noteworthy that, with its return to democracy in 1990, Chile continued the restoration of the liberal trade regime that had been partially reversed during the crisis of 1982.

The success of democratic governments in implementing these reforms, which have suffered no major reversals, is significant in that it belies the conventional wisdom that democratic leaders are particularly vulnerable to powerful protectionist groups and therefore less able to sustain reforms.

Lessons of the reforms

Several important lessons can be derived from the experience of the trade reforms in Latin America and the Caribbean during the 1980s.

• ***Trade reforms are successful if they are bold and extensive.*** Wide-ranging, vigorously implemented reforms send a powerful signal of the direction of government policy and liberate that policy from parochial and vested interests. In these Latin American and Caribbean countries, the boldness of the reforms was accentuated by the extenuating economic circumstances under which the reforms took place.

• ***Successful trade reforms require a supportive macroeconomic environment.*** Trade reforms in all the countries were initiated and maintained in the context of tight monetary and fiscal policies. (Brazil is an exception, since its crawling exchange rate regime largely insulated the real exchange rate from macroeconomic imbalances.) Such policies are necessary not only to reduce real expenditures and improve the balance of payments, but also to ensure that the accompanying real devaluations are noninflationary. For example, in both Chile and Mexico, prudent fiscal adjustment has been crucial to the success of trade reforms and recent strong growth.

• ***Successful trade reforms are, in general, preceded or accompanied by a depreciation of the real exchange rate.*** Real devaluations ensure the sustainability of trade reforms by offsetting the excess demand for tradeables that reforms induce. While the real exchange rate is not in itself a policy variable, it can be influenced by nominal devaluations and restrictive macroeconomic policies.

• ***Successful trade reforms can be sustained by democratic governments working against pressure exerted by powerful interest groups.*** To the extent that the trade reforms in Latin America and the Caribbean were implemented in conjunction with painful economic stabilization measures, they attracted resistance in many countries. And in some cases, moving toward more open trading policies meant challenging the powerful vested interests that had been the primary beneficiaries of protectionist policies.

Challenges of sustainability

While the trade reforms in Latin America and the Caribbean have been successful, sustaining them remains a challenge. The experiences of these countries suggest that the best way to ensure sustainability is to promote and maintain a stable macroeconomic environment through prudent fiscal management, economic deregulation, financial sector reforms, and greater competition. On this count, the prospects are good, and many countries have already achieved success on this front. Some, such as Brazil, still have a long way to go.

Like GATT membership, recent efforts toward regional integration will help consolidate the reforms by providing a binding legal agreement among the countries involved to maintain their more open policies. The outlook for sustainability has improved since many of the countries in the region joined GATT and adopted GATT-consistent rules on antidumping, subsidies, and customs valuation. Successful conclusion of the Uruguay Round of multilateral trade negotiations would also, no doubt, facilitate the sustainability and deepening of the trade reforms. Latin American and Caribbean countries stand to gain tremendously from such an outcome, which would provide increased global market access, reduced agricultural subsidies in the industrial countries, liberalization of the Multi-Fibre Arrangement, and improved rules of behavior. Such transparent, significant, and tangible benefits can only undermine protectionist opposition within these countries and strengthen the voices of reform and openness. ■

For a detailed analysis see "Trade Policy Reform in Latin America and the Caribbean in the 1980s" by Asad Alam and Sarath Rajapatirana, Policy Research Working Paper 1104, The World Bank, February 1993.

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BOOKS

Is a "Gradualist" Transition an Oxymoron?

The Emergence of Market Economies in Eastern Europe
ECONOMIC TRANSITION IN EASTERN EUROPE
Trials of Transition
Economic Reform in the Former Communist Bloc

Christopher Clague and Gordon Rausser (editors). **The Emergence of Market Economies in Eastern Europe.** Blackwell, Cambridge, MA, USA, 1993, 229 pp., $20.

Michael Ellman, Egor Gaidar, and Grzegorz Kolodko. **Economic Transition in Eastern Europe.** Blackwell, Cambridge, MA, USA, 1993 128 pp., $21.95.

Michael Keren and Gur Ofer (editors). **Economic Reform in the Former Communist Bloc.** Westview Press, Boulder, CO, USA, 1993, vii + 308 pp., $44.95 ($17.95 paper).

Andras Köves. **Central and East European Economies in Transition.** Westview Press, Boulder, CO, USA, 1993, ix + 150 pp., $49 ($17.95 paper).

With the rejection of central planning in Eastern Europe and the breakup of the former Soviet Union, the "economics of the transition" has emerged as a growth industry of sorts. It has attracted some of the most respected mainstream economists as well as longtime experts on the former centrally planned economies (CPEs). Three of the books under review are collections of essays written for conferences held in 1991. The fourth volume, by Andras Köves, focuses on the international dimension of the transition.

By now it is a cliché to say that there is no theory of the transition, but one is not disabused of this judgment from reading these books. If one fundamental truth does emerge from them—if only inadvertently—it might be that thinking about the transition is likely to be, in a word, "transitional." When these essays were written, Poland was only one or two years into its celebrated adjustment *cum* reform program, the Czech and Slovak Federated Republic (which no longer exists) had just launched its program, and the former Soviet Union had not yet dissolved. Many of the contributors to these volumes were particularly impressed by the fact that output was declining sharply in Eastern Europe and the former Soviet Union, foreign trade was collapsing, inflation was not yet licked in those countries with major stabilization programs and was accelerating in other former CPEs, and privatization was getting off to a very slow start. (Köves, incidentally, makes the interesting point that the foreign trade collapse in Eastern Europe in 1991 was due mainly to the political and economic crisis in the former Soviet Union, not to the abandonment of the Council for Mutual Economic Assistance (CMEA) trading mechanism per se.) If there is a preoccupation that runs through these volumes, it is the issue of whether gradualism might not be preferable to the "big bang" or "shock therapy" approach that was rapidly becoming the norm among transitional economies.

The issue is unfortunately not as straightforward as commonly believed. Thus, Gur Ofer (in the volume edited by Keren and Ofer) and others point out that while liberalization and macroeconomic stabilization policies can be adopted virtually overnight, fundamental transformation of the legal and regulatory structure and privatization almost inevitably are much more drawn out. The "big bang" only applied to part of the task, and the issue for many of the authors is whether liberalization and macroeconomic stabilization policies should not be pursued more gradually in order to achieve a kind of consistency across all the dimensions of the transition. Indeed, noting that the behavior of economic agents and organizations cannot be changed overnight, Peter Murrell (in the volume edited by Clague and Rausser) and others argue for a more "evolutionary" approach, which would lay greater stress on changing old institutions and creating new ones than on getting economic policies "right" in the short run.

Anne Krueger and Stanley Fischer (in Clague and Rausser) present a compelling case for concentrating effort early in the transition on reaping the relatively quick payoff from new private sector activities rather than attempting to privatize the state-owned industrial behemoths that dominated the CPEs. Murrell goes further and argues for avoiding the costs associated with privatizing existing enterprises and instead closing them down "in coordination with the gradual rise of new private enterprise." It is not at all clear, however, how this phasing process should or could be operationalized.

Ronald McKinnon (also in Clague and Rausser) is more precise in his gradualist prescriptions, although not necessarily more persuasive. For example, instead of the immediate liberalization of foreign trade, McKinnon calls for the "tariffication" of the old quantitative restrictions implicit in central planning, followed by the phasing out of tariffs over 5 to 10 years to allow the restructuring of industry rather than its destruction by foreign competition. McKinnon more generally suggests that there is a "natural" or "optimum" order of economic liberalization, but one wonders about the waste of resources in the meantime.

Gur Ofer argues that a one-time price revision by the authorities is the best way to avoid a price-wage spiral, whereas full liberalization of prices carries much greater risks. Yet this prescription ignores the relatively positive results of the Polish

price liberalization of January 1990 and the abject failure of Soviet price revisions in 1991. More generally, it is not at all clear how the authorities could know what either the right price level or the equilibrating structure of relative prices would be.

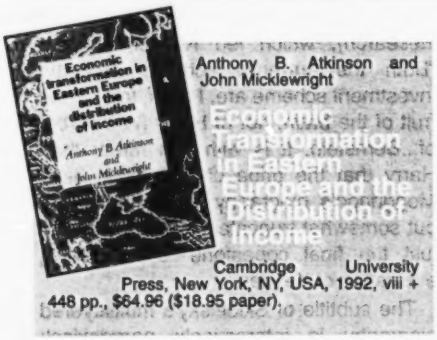
The reader of these volumes will thus find a host of ideas about how to avoid a radical dismantling of the old system so as to preserve, presumably, the momentum of reform. The argument seems to be that while output would still decline during the early stages of the transition, gradualism would ensure that the drop would be less sharp than with the big bang and that the rebound would come soon enough to result in smaller cumulative adjustment costs. The advocates of gradualism, however, leave a number of crucial questions unanswered. For instance, if relative prices are permitted to change only gradually, what will happen to the accumulating stocks of overpriced goods (in the absence of planners determining effective final demand), and how will the authorities respond to continued complaints about shortages? Alternatively, if most prices are liberalized, where will the money come from to keep traditional producers in business? Wouldn't this money be better spent on a social safety net (including job retraining and selected public works) for workers laid off by firms unable to adapt to the new environment?

McKinnon proposes that different classes of enterprises receive very different treatment. At one extreme, "traditional" state enterprises would have their output and prices controlled by the planners, and their inputs would be centrally allocated. New private entities, by contrast, would basically operate under liberalized market conditions. The incentives for corruption and black markets in such a situation would seem to be overwhelming. And what is the political dynamic that would ensure that the traditional sector would not retain sufficient political clout to preserve indefinitely its initial commanding position? The limited market-oriented reforms in Hungary and Poland in the 1970s and 1980s have certainly taught us a number of lessons, including the need for the political leadership to yield to the market (and therefore to society at large) the determining influence in resource allocation and to permit the development, as quickly as possible, of a genuine market culture rather than attempts to simulate the market. The attempt to control the pace of liberalization and stabilization somehow seems out of synch with the new democratic realities in most of the countries in question.

Michael Ellman (in Ellman *et al*) hits it on the head when he notes that the issue in the 1990s is not the reform of an existing system but its replacement. If one plans for gradualism, there is the danger—as Anne Krueger notes—that uncertainty will persist as to whether the transformation will actually take place and that this will only encourage those who have a vested interest in preserving the old system. Unless prices are liberalized early on, the bulk of investment will continue to be misallocated, and genuine restructuring will only be delayed. It is also difficult to imagine a policy of gradualism encouraging needed foreign direct investment and foreign assistance.

In the end, it is an issue of the credibility of the reformers. There is no doubt that their credibility will be affected by short-term economic performance. But as we have seen, there is more than one way to interpret this performance. If the initial slump in output and growth in unemployment under radical reform is viewed as an absolutely essential first step in restructuring rather than a downward spiral set in motion by misguided policies, the credibility of reform need not suffer—particularly if the transitional economy has an adequate social safety net. These interesting essays, written very early on during the transition, tend, however, to lean toward the latter view. In looking forward to the next round of stocktaking, the betting from this corner is that there will be fewer voices advocating gradualism.

Thomas A. Wolf



Anthony B. Atkinson and John Micklewright, Economic Transformation in Eastern Europe and the Distribution of Income, Cambridge University Press, New York, NY, USA, 1992, viii + 448 pp., $64.96 ($18.95 paper).

Income distribution is a difficult subject to write about, as the topic is often more descriptive than analytical, containing a number of details and insights that need to be woven into a coherent picture. However, in their book, Atkinson and Micklewright have succeeded in doing just this.

The authors analyze income distribution and poverty up to the final years of communism in Czechoslovakia, Hungary, Poland, and the Soviet Union. They note that wage distribution in socialist economies tended to be more equal than in the West, and they point out differences among the four countries studied. Czechoslovakia, for example, had the most equal wage distribution. The average state-sector wages in the Czech and Slovak Republics were almost identical; the gap was gradually closing to the point of disappearing in the 1980s. This was probably caused by the tradition of egalitarianism, conscious attempts to reduce income differences between the republics, and stricter planning than elsewhere. Hungary and Poland have also been more egalitarian than Britain, but less so than the Soviet Union, where widely differing economic conditions and development levels in the individual republics resulted in greater inequality.

How did economic reforms of the 1960s and later in the early 1980s affect distribution of wages? Not surprisingly, in Hungary and Czechoslovakia, wage dispersion increased. In the Soviet Union, on the other hand, wage inequality declined almost evenly following the end of the Stalinist period. In Poland, wage inequality was never as narrow as it was in the heyday of Solidarity in 1980–81.

Wages are the most important source of income both in market economies (where they account for about 70 percent of gross household income) and in Eastern Europe (about 60 percent). What happens when we move from wage distribution to overall income distribution? In market economies, inequality increases because self-employment and capital income (the latter often underestimated) are fairly unequally distributed, although positively correlated with total income. Progressive taxes and social transfers reduce the inequality, but disposable income still remains more unequal than wages.

In socialism, disposable income is more equally distributed than in capitalism, because self-employment income (relatively unequally distributed) and social transfers (more or less uniform per capita) balance each other off. The difference in inequality between the two systems, however, is not major. The average Gini coeffi-

cient—a measure of the concentration of income, with the maximum being 100 points—in developed capitalist economies is about 30, compared with 25 for Eastern Europe.

Atkinson and Micklewright introduce the concept of "distributional advantage." For example, if Czech or Hungarian income distribution were to take the shape of British distribution, then the income of the lowest decile would have to increase by 40 percent just to keep the absolute income level of the lowest decile unchanged. This underscores the problems faced by the transition economies: the poor will be hurt both through a change in the income distribution curve (as it becomes more unequal) and an overall decline in income.

This introduces the issue of poverty. In Czechoslovakia, in the 1980s, equal income distribution was accompanied by very little poverty: less than 1 percent of the population was considered to have insufficient income for subsistence, and 7 percent was living below the minimum. In Hungary and Poland, poverty rates ranged between 15 and 25 percent. The brunt of the increase in poverty in the 1980s fell on workers' households in both countries. In the Soviet Union, decentralization prior to the breakup led to divergence in average income and wage levels as well as in poverty rates.

The authors also discuss the issue of equivalence scales (meaning that a two-member household does not need twice as much as a single-member household to be equally well off). They point out that economies of scale in consumption are less important if rents, electricity, heating, and other overheads are relatively cheap. Thus, the East European statistical offices' long-standing practice of using per capita rather than household (or equivalent household) income makes more sense than it would in market economies.

At the end of the book, Atkinson and Micklewright have compiled practically all the existing published data on income and wage distribution for the four countries from the mid-1950s to the late 1980s. This easily accessible data, as well as the authors' success in providing benchmark work on income distribution at the end of the communist rule, leaves little doubt that researchers will use the book frequently in years to come.

Branko Milanovic

Donald G. Moggridge

Maynard Keynes: An Economist's Biography

Routledge, New York, NY, USA, June 1992, xxxi + 941 pp., $37.50.

Robert Skidelsky

John Maynard Keynes: The Economist as Saviour, 1920–1937

Volume Two, Macmillan, London, UK, November 1992, xxxv + 731 pp., £35.

Why yet two more massive biographies of arguably the most researched and most publicized economist of the twentieth century? The reader may feel entitled to an answer after the publication (in the same year) of two such densely textured panoptic biographies, both with an awesome scholarly apparatus that draws on virtually every extant archival source. The answer lies in the progressive enlargement of sources available to successive biographers since the pioneering—and only official—biography of Keynes by Roy Harrod (1951). Even the 30-volume *Collected Writings of Keynes* (CW), (1971–89), coedited by Moggridge, does not contain the complete papers of Keynes. New evidence justifiably warrants the type of reappraisals found in these two books, which should be evaluated as "warts and all" biographies and not as explications of "what Keynes really meant, or should have meant," or as contributions to the history of economics. These biographies must also be judged in terms of their differing frames of reference. Moggridge's single-volume, full-life biography attempts to cast Keynes in his "natural mould" and to give the reader a glimpse of "what Keynes might have been like as a colleague," whereas the second volume of Skidelsky's projected three-volume biography of Keynes describes Keynes's "metamorphosis from aesthete, philosopher, and administrator into world saviour...out to save a capitalist system he did not admire."

Moggridge succeeds admirably in telling the story of Keynes as a precocious pupil at Eton and King's College; a creative civil servant at the India Office; a life-long Fellow of King's College, who passed up successive chances of becoming a Provost of King's and Pigou's successor to the Cambridge professorship of political economy; and a man who straddled with seemingly effortless distinction the diverse worlds of academia, artistic Bloomsbury, official Whitehall, the City of London, public affairs, and journalism. Not mentioned are his little known role as the only non-Jewish member of the Advisory Committee on Palestine, which submitted the Report to the Peace Conference in Paris (February 23, 1919), and his nomination for the Nobel Peace Prize in 1923—a year in which no award was made.

Of particular interest are the perceptive chapters on the genesis and evolution of Keynes's major works, *Probability*, *Economic Consequences of the Peace*, *Treatise on Money*, and *General Theory*. The chapters on the Clearing Union and Bretton Woods, which draw on the papers of James Meade and Lionel Robbins, among others, spotlight the little known but crucial role of E.M. Bernstein (of the US Treasury and the IMF's first Director of Research), which led Keynes to say: "Both the currency scheme and the investment scheme are, I think, largely the fruit of the brain, not of Harry [White], but of...Bernstein. It is with him rather than Harry that the pride of authorship lies." Moggridge's biography is an impressive but somewhat truncated edifice that lacks just the final copestone—a concluding evaluation of Keynes.

The subtitle of Skidelsky's multilayered biography is interestingly paradoxical: was Keynes really the savior of capitalism, as Skidelsky claims? Indeed, Skidelsky also admits that Keynes was "spectacularly wrong" in the belief that capitalist economies would simply stagnate under the *laissez-faire* system and that countries with vastly different political and social systems—democratic Sweden, paternalist Japan, totalitarian Germany, and New Deal America—all recovered from the slump of the thirties through successful 'Keynesian' policies "based on theoretical constructs quite different from that of the General Theory." In fact,

Keynes himself acknowledged that much of the General Theory "is illustrated and expounded mainly with reference to the conditions existing in the Anglo-Saxon countries."

"Keynes as Saviour" is a strangely flawed theme, which only obscures Skidelsky's masterly analysis of Keynes's enduring economic contributions, notably the much neglected Treatise on Money, which Skidelsky puts on a par with the General Theory. The author sagely cautions against "reading off" Keynesian prescriptions from a single book and rightly identifies Keynes as "the first economist to visualize an economy as an aggregate." This "new way of seeing the architecture of an economy," Skidelsky maintains, may be the General Theory's most enduring legacy. He might well have added that Keynes's ideas are still the most fruitful source of testable hypotheses, which indeed is the ultimate test of scientific status. Skidelsky also does well to point out, apropos of the much misunderstood Keynes-Tinbergen controversy, that "Keynes objected not to econometrics but to the method of econometrics." Keynes is rightly portrayed as a political economist who "invented theory to justify what he wanted to do," a characteristic that stamps Keynes as a heresiarch and innovator rather than an economic messiah.

Skidelsky's scrupulous scholarship has not spared him some demonstrable errors and omissions. For instance, J.V. Joshi was not the Deputy Governor but Executive Director of the Reserve Bank of India; Henrik Ibsen, the Norwegian dramatist, is described as a "Swedish playwright." Meade's first at Oxford is cited but not his Nobel Prize, which is mentioned in the biographical entries for Hayek, Hicks, and Tinbergen; and A.W. Phillips and W.T. Newlyn are not identified as the inventors of the Keynesian hydraulic machine. It is surely odd to describe Harold Laski, a political theorist, as "a jurist." But less forgivable are the gratuitous references to Roy Harrod ("a great economist but not a good biographer"); Austin Robinson ("more an academic politician and administrator than a theorist"); and Maisky, Soviet diplomat ("surprisingly long lived").

It is also ironic that both Moggridge and Skidelsky, for all their comprehensiveness, manage to overlook some of Keynes's pioneering contributions, notably the seminal concept of "the fringe of unsatisfied borrowers," which is the genesis of the modern literature on credit rationing and financial market imperfections; the theory and organization of central banks, particularly their developmental role; and his prescient warning of technological unemployment due to economies in "the use of labour outrunning the new uses of labour," which is so relevant to the contemporary phenomenon of the jobless recovery in industrial economies.

Finally, some nagging questions: do monumental biographies also need to be monumental in size and length? Is there no room to wield that most hallowed and serviceable instrument, Occam's Razor, which maintains that entities ought not to be multiplied except from necessity? Or do biographers adhere subliminally to Gogarty's Theorem, "There is no such thing as a large whiskey"?

Anand Chandavarkar

Matthew B. Canzoneri, Vittorio Grilli, and Paul R. Masson (editors)

Establishing a Central Bank: Issues in Europe and Lessons from the US

Cambridge University Press, New York, NY, USA, 1992, ix + 307 pp., $44.95.

Since the inception of the European Community (EC), there have been several attempts to move toward a European Monetary Union. The treaty agreed to at Maastricht in the Netherlands in December 1991 is the most recent bid to create a European central bank and a single currency. The papers in this volume, originally presented at a conference held at Georgetown University some months before the Maastricht treaty was signed, address a number of the most important issues involved in the design of a monetary constitution for the EC. The federal structure of the proposed bank, its political and economic independence, and its role in prudential supervision and as a lender of last resort are discussed, as are the benefits and costs of a common currency, the role of fiscal policy in a monetary union, and the implications of economic and monetary integration in Europe for the world financial system.

Although already overtaken by history, the book continues to be worthwhile reading. In particular, several of the fundamental questions it raises have re-emerged in the debate surrounding the ratification of the Maastricht treaty by EC member states and will continue to be of interest for years to come, whether or not the Maastricht process is ultimately successful.

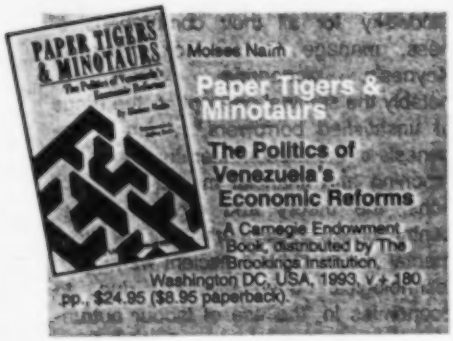
First, there is the central problem of whether the formal independence of the monetary authorities is sufficient to ensure price stability in a monetary union made up of participants with very different monetary and economic policy traditions. Central banks are often subject to considerable political pressure to provide easy money, even in countries where they have traditionally been independent. The wide range of arguments marshaled by Alesina and Grilli and their discussants makes clear that this question has many facets that are not easily amenable to analysis and will be settled only by experience.

Second, the chapter by Jeffrey Sachs and Sala-i-Martin discusses fiscal stabilizers, a topic on which the Maastricht treaty is silent. They argue that in the absence of exchange rate adjustments, an EC-wide system of such stabilizers will be needed to offset regional shocks to economic activity; the discussants clearly disagree. This juxtaposition of views provides a number of valuable insights and is a useful point of departure for further thinking about the role of fiscal policy in a monetary union.

The most notable omission is a discussion of labor market issues. In a monetary union, regional wage shocks resulting from excessively rigid wage bargaining arrangements cannot be offset by exchange rate changes and may lead to higher structural unemployment. Monetary union is also likely to affect the behavior of labor unions and employers in ways that are not well understood and may increase the international migration of workers.

All in all, this volume provides a considerable wealth of arguments and ideas. It will be helpful to scholars and policy analysts with an interest in European monetary integration.

Karl Habermeier


PAPER TIGERS & MINOTAURS
Moises Naim
Paper Tigers & Minotaurs
The Politics of Venezuela's Economic Reforms
A Carnegie Endowment Book, distributed by The Brookings Institution, Washington DC, USA, 1993, v + 180 pp., $24.95 ($8.95 paperback).

Paper Tigers & Minotaurs. The title harks back to a saying by an Italian political theorist: "The ancient is dying and the new has yet to be born. In the interlude, monsters are bred." This is an exceptionally good book, all muscle and no fat, combining political economy and world-class economics. To abuse metaphor, Moises Naïm, a former Minister of Industry in Venezuela, was one of the *preux chevaliers* who set out to slay the many dragons of entrenched vested interests and to dismantle the age-old system of collusion between government and powerful private interests—a process punctuated by riots and attempted military coups.

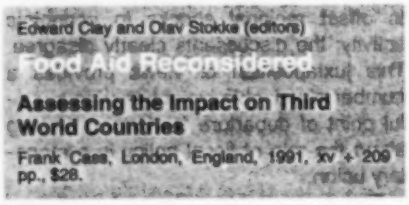
So long as the dragons were alive and breathing fire, they trampled Venezuela's economy. As a result, the country achieved the dubious distinction of suffering living standards that stagnated during the 1970s and fell during the 1980s in spite of two whacking oil price increases. The courageous reform program of 1989 was meant to end the rot and to revitalize the economy. In that, it was spectacularly successful. Venezuela's economy took off in the years following the reforms, and today a consensus has crystallized that liberalization is the best course. Indeed, Carlos Andres Perez, the "father of the reforms" having been ousted on charges of corruption, the interim government might have tried to reverse the process but instead is moving it forward.

The book starts off with a vivid description of the *ancien régime*—how it bred corruption and corroded entrepreneurship—then describes the "policy shock" of 1989, its initial effects (including "public outcry and crime waves"), the subsequent solid economic improvements ("the private sector: from courting the State to courting the Market"), and tells the tale of the attempted coups. Naïm then steps back and reflects on why improved economic performance may not ensure popular support; the somewhat downbeat conclusion is that new economics do not mix well with old politics and that a reform of the State must be part and parcel of the modernization process.

He argues that the building of a competitive market economy requires a competent and relatively autonomous state. Countries in the process of building a market economy will increasingly discover that they cannot have a competitive private sector without a competitive public sector. This is borne out by the successful experiences of Japan, the East Asian "Miracle Countries" and, more recently, Chile. Naïm also places great stress on media management, one of the weakest aspects of reform. Few governments in the developing world succeed in explaining their reform programs to the public.

A preface by Jeffrey Sachs flags the relevance of the book to a whole lot of reforming countries, especially some of the former communist economies. I agree. This is a hard-to-put-down book, full of wise and practical advice to knights fighting dragons elsewhere in the world. It should be read by anyone interested in developing countries.

Guy Pfeffermann


Edward Clay and Olav Stokke (editors)
Food Aid Reconsidered
Assessing the Impact on Third World Countries
Frank Cass, London, England, 1991, xv + 209 pp., $28.

Food aid has been one of the most controversial forms of aid. This set of essays provides a useful updating of the key issues associated with food aid, especially its effectiveness, but it does little to resolve the main controversies. Unfortunately, as is so often the case with discussions of food aid, it seems easier to identify areas of dispute than to move on to more definitive operational conclusions about its usefulness as a development tool or as a device to achieve higher levels of food security. Perhaps for this reason, food aid has declined from nearly 20 million tons in the early 1960s to about 10 million tons (of cereal equivalent) since the early 1970s and has become more concentrated on emergencies, where controversy is least evident.

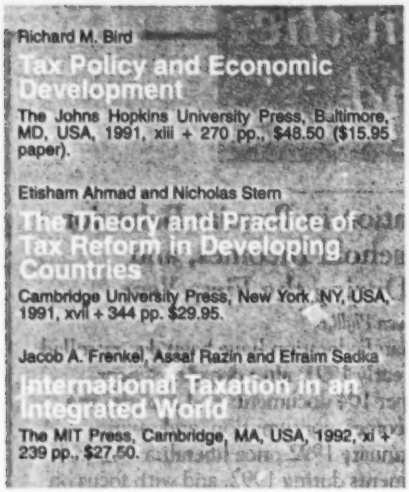
Saran and Konandreas, for example, examine at some length whether food aid has any element of "additionality." On balance, they think not, but their conclusion is far from certain. Similar doubts surround the issue of the "disincentive" effects of food aid—the "storm centre" of the debate on food aid. Most analytical studies have not been able to identify large-scale disincentive effects; instead, they rely on multiple examples of anecdotal evidence. Simon Maxwell presents a useful "checklist" for practitioners to guide judgments regarding possible food aid disincentives. He argues convincingly that where they do exist, they can be overcome by integrating food aid into an overall food policy.

Reaching a rather different conclusion, John Cathie argues that the success of Botswana, a country much praised for its use of food aid to achieve food security, has been at some cost to local production. "The basic problem facing the Government of Botswana cannot be solved by food aid, and it has yet to be shown how this form of aid can contribute to the economic growth of a country."

Hans Singer, a respected and long-time advocate of food aid, argues for a renewed use of food aid to help offset adverse food consumption impacts of structural adjustment in sub-Saharan Africa. He identifies a "menu of potentialities" for food aid to contribute to structural adjustment, which are, in a different form, the traditional arguments for effective utilization of food aid. Unfortunately, as in the traditional discussions of food aid, his arguments are not likely to convince those strongly opposed to the use of food aid.

Overall, one is left with the feeling that the arguments surrounding food aid are caught in an analytical stalemate. There is clearly a need to bring some of these arguments to a conclusion. And, in a world where nearly one billion people lack sufficient food largely because they cannot afford to buy it, the issue of economic efficiency cannot be the only criterion on which the effectiveness of food aid is judged.

Pierre Landell-Mills


Richard M. Bird
Tax Policy and Economic Development
The Johns Hopkins University Press, Baltimore, MD, USA, 1991, xiii + 270 pp., $48.50 ($15.95 paper).
Etisham Ahmad and Nicholas Stern
The Theory and Practice of Tax Reform in Developing Countries
Cambridge University Press, New York, NY, USA, 1991, xvii + 344 pp. $29.95.
Jacob A. Frenkel, Assaf Razin and Efraim Sadka
International Taxation in an Integrated World
The MIT Press, Cambridge, MA, USA, 1992, xi + 239 pp., $27.50.

These three books each deal with taxation, but in very different ways. They are different in content, intended audience, and style. Bird's book is written in a clear, nontechnical, punchy, attractive style, without a single table, graph, or equation. He deals with taxation, growth, and distribution; and with taxing income, consumption, and wealth. His most interesting chapters are on the administrative dimensions of tax reform, in which he emphasizes that there is a great discrepancy between what the legislative tax system appears to be and how it actually works; this affects all aspects of public finance, including the effective distribution of income and wealth. Anyone can read this book with interest. All tax advisors and reformers should do so, and even politicians could do so with profit.

Ahmad and Stern combine text and data to produce a readable book that is somewhat mistitled; it should really include a subtitle, "Pakistan—A Case Study," for the bulk of the text involves an interesting application of the authors' ideas on the principles of tax design and reform to the existing tax structure in Pakistan, with numerous asides to an earlier study on India. There is a link with Bird's book in that Ahmad and Stern in their analysis never forget to pay attention to the need for simplicity in administration, an easy way to measure the tax base, and the possibilities of evasion and corruption. However, Ahmed and Stern's interest is fixed more on the distributional characteristics of each tax. The text is technical but not too burdensome. Anyone working on tax reform in developing countries could read this book with profit, and students could learn a great deal from it about good data preparation and testing.

Frenkel, Razin and Sadka's publication is of a very different nature. It deals not with developing countries, but with an integrated world economy. As economic integration progresses, the effects of taxation in any country may have significant implications for households in other countries and for flows of capital and labor. The authors reduce the multiple tax options available by using many equivalences among tax instruments and from this simplification derive some interesting results. Inevitably, such a book raises more questions than it answers. But for that very reason it is stimulating, especially in the context of the increasingly integrated monetary, capital, and labor markets of Europe and North America. It is by no means as easy to read as the previous two publications, with a text liberally sprinkled with equations, but it is a most serious attempt to deal with public finance in an increasingly integrated world. The questions raised involve issues that all public financiers should pay attention to.

Alan Tait

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